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Sol LeWitt
Haags
Gemeentemuseum
25 juli–30 aug '70

This exhibition is for Eva Hesse

Vertical lines not touching 1970 (detail)
Galerie Yvon Lambert, Paris

Acknowledgements

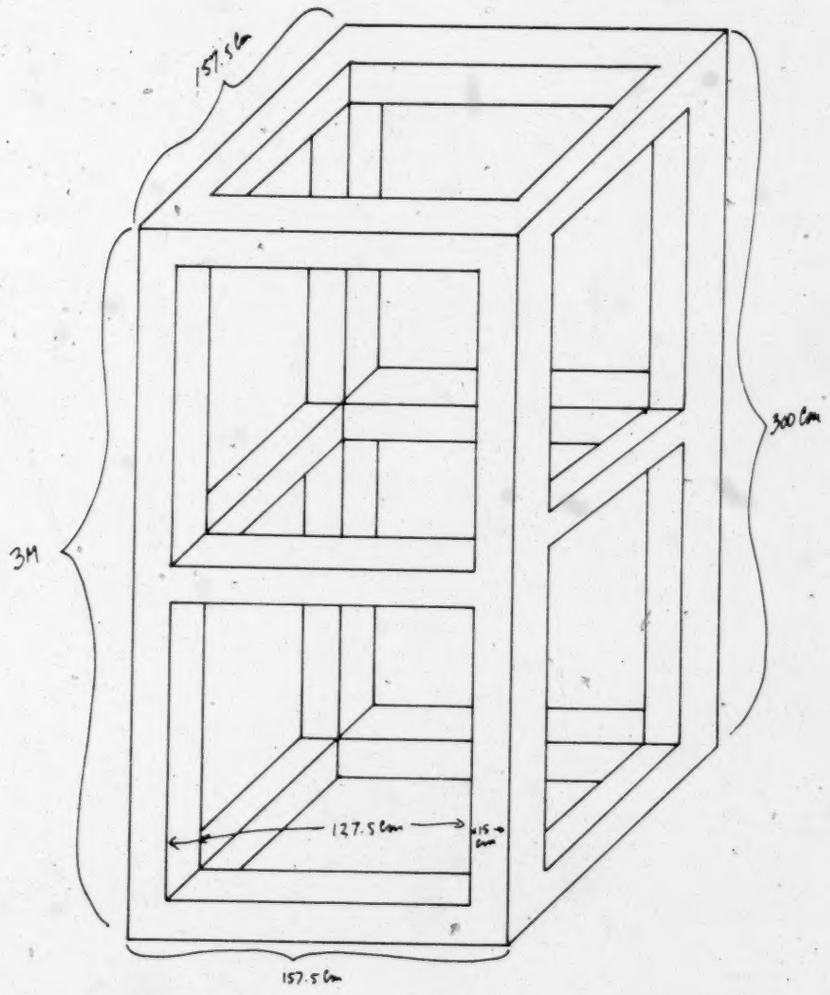
The exhibition and this publication owe a lot to a number of people, mostly friends of the artist, who have cooperated by lending us drawings and sculptures, by sending photographs and other important information, whereas many generously contributed articles, essays or memories about the artist. The help of John Weber of the Dwan Gallery, New York, and Konrad Fischer, Düsseldorf, has been vital in every respect for this enterprise. Both are lenders to the show, as are Jan Dibbets, Kaiser Wilhelm Museum, Krefeld, Galerie Yvon Lambert, Paris and Milan, Count Panza di Biumo, Milan, Galeria Sperone, Turin and Mr. & Mrs. Martin Visser. We are indebted to all of them. Art & Project, Amsterdam, Mr. Herman van Eelen, Dorothy Mayhall, Ridgefield (Conn.), Mr. Dick van der Net, Bergeijk and all lenders have contributed photographical information and Carl Andre, Terry Atkinson, Mel Bochner, Dan Flavin, Dan Graham, Eva Hesse, Ira Licht, Lucy R. Lippard, Coosje Kapteyn-van Bruggen, Michael Kirby, Dick van der Net, Barbara Reise, Hans Strelow and Lawrence Weiner volunteered written material for this book. We owe them our thanks. Mr. James Fitzsimmons of Art International and Mr. Philip Leider of Artforum kindly gave permission to reprint articles by John R. Chandler and Rosalind Kraus. All three-dimensional work has been manufactured at Nebato N.V., Bergeijk under supervision of Mr. Dick van der Net.

The walldrawing has been executed by a team of draughtsmen consisting of: Berend Geest, Geoff Jones, Petra de Jong, Sol LeWitt, Evelien Scheffer and Ferry Staverman. We are grateful to them for doing a splendid job.

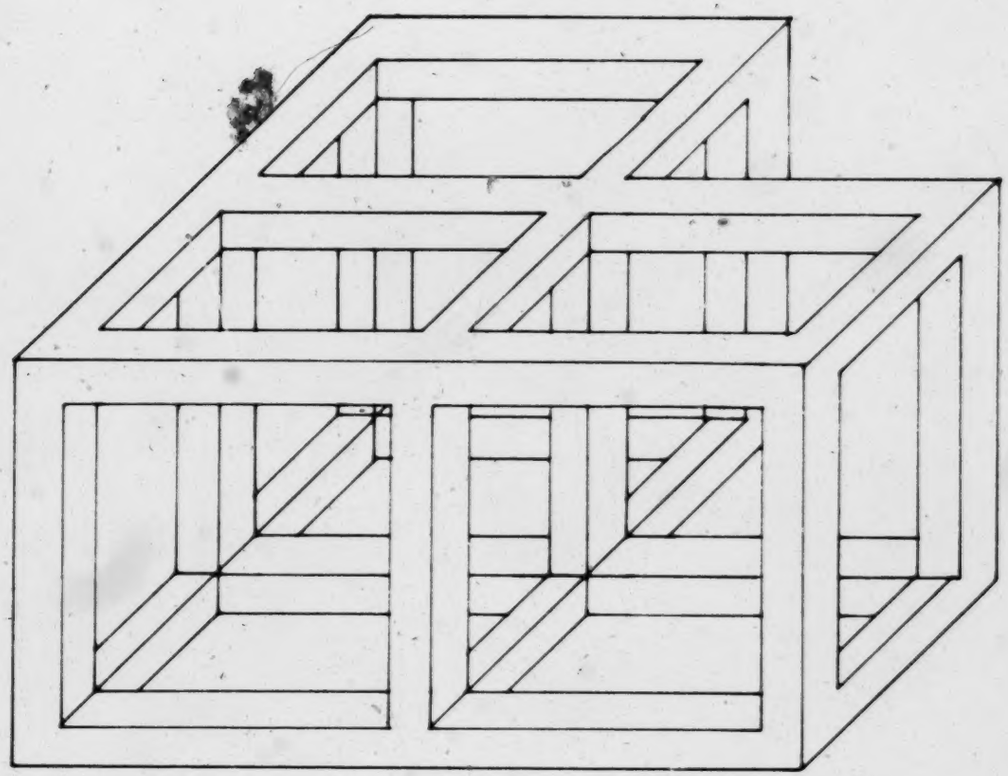
As Sol LeWitt feels there is no permanent view possible on his work, but a many facetted one, there is no explanatory introduction. Enno Develing of our staff, who is responsible for exhibition and publication, joins the row of writers who give their very personal opinion on Sol LeWitt's work. In order to avoid any preference their entries are included in alphabetical order.

L.J.F.W.

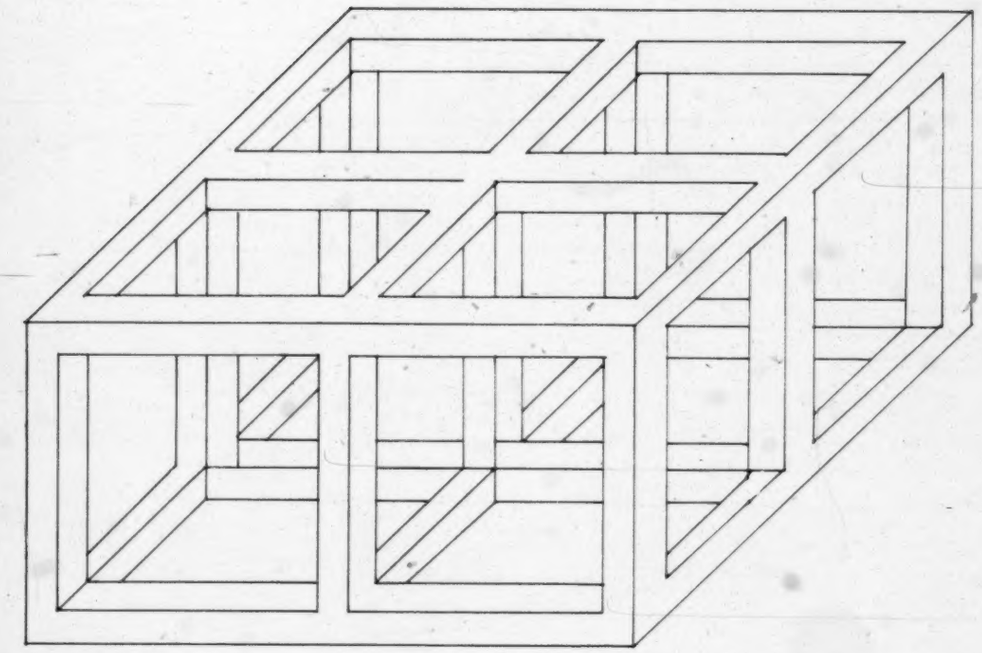
Drawings for the open modular structures as shown at the exhibition

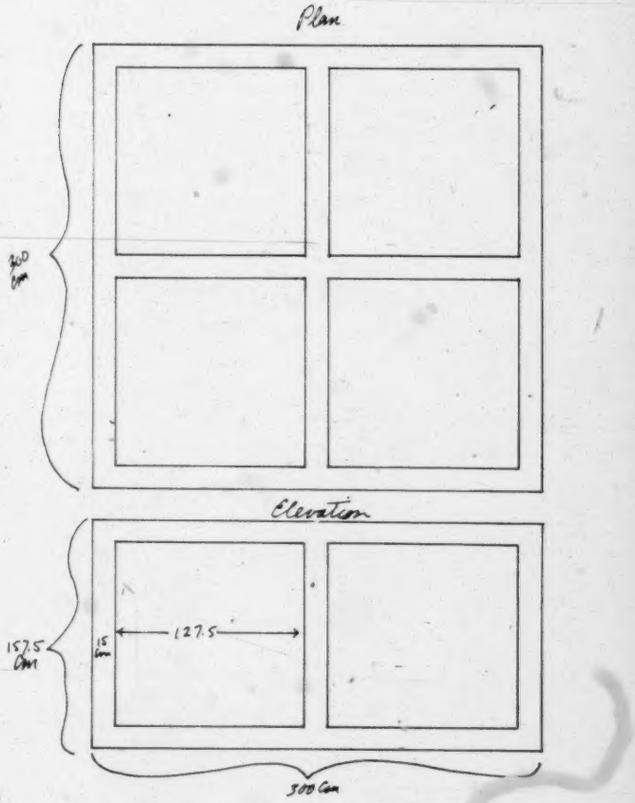


Drawing for two open cubes 1969

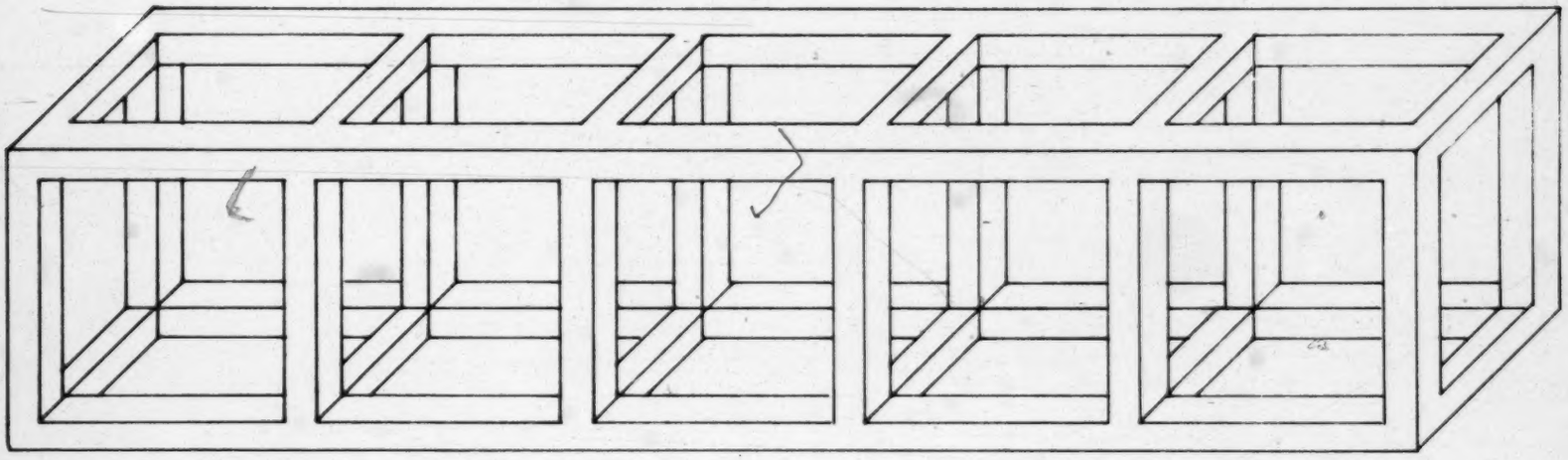


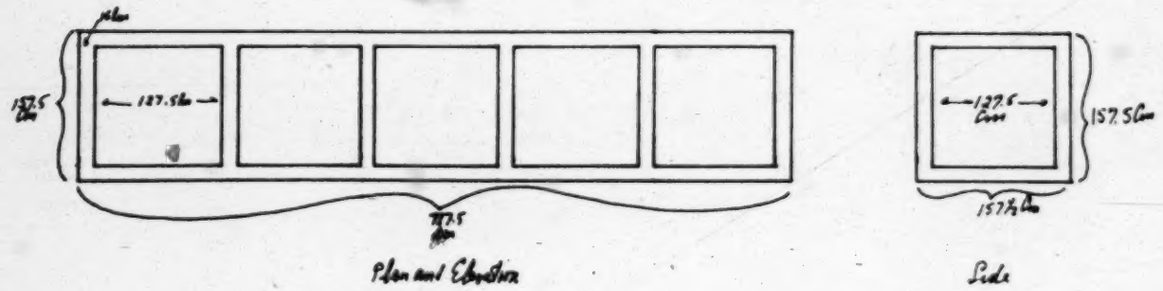
Drawing for three open cubes (angled) 1969



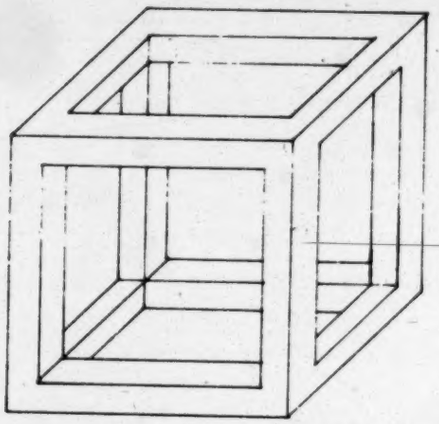


Drawing for four open cubes (in a square) 1969

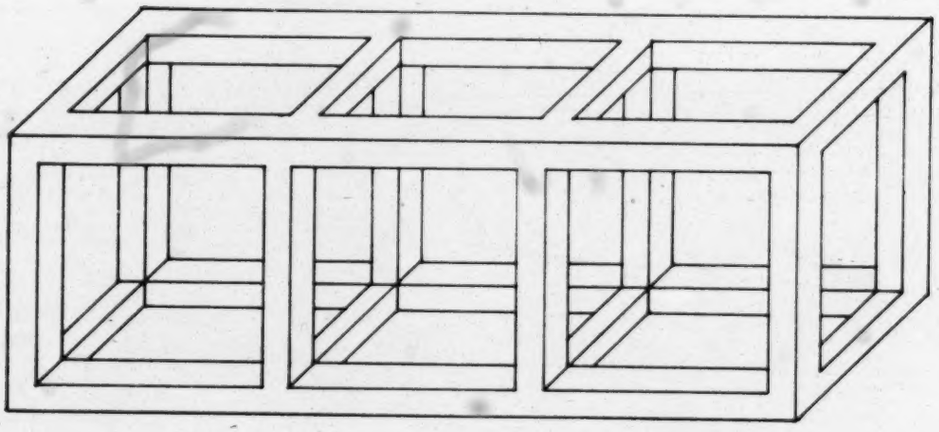




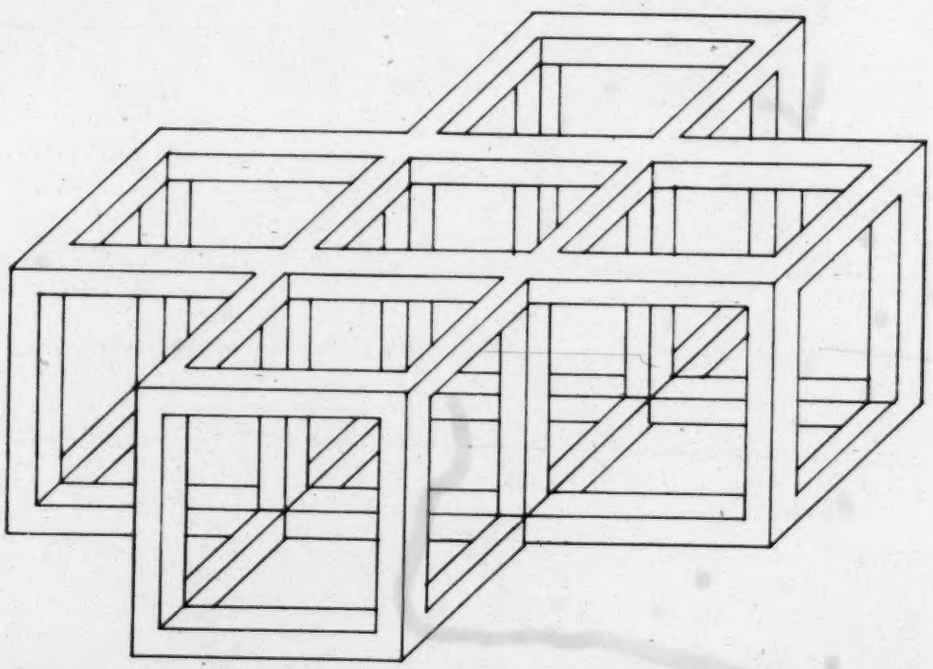
Drawing for five open cubes 1969



Drawing for one open cube



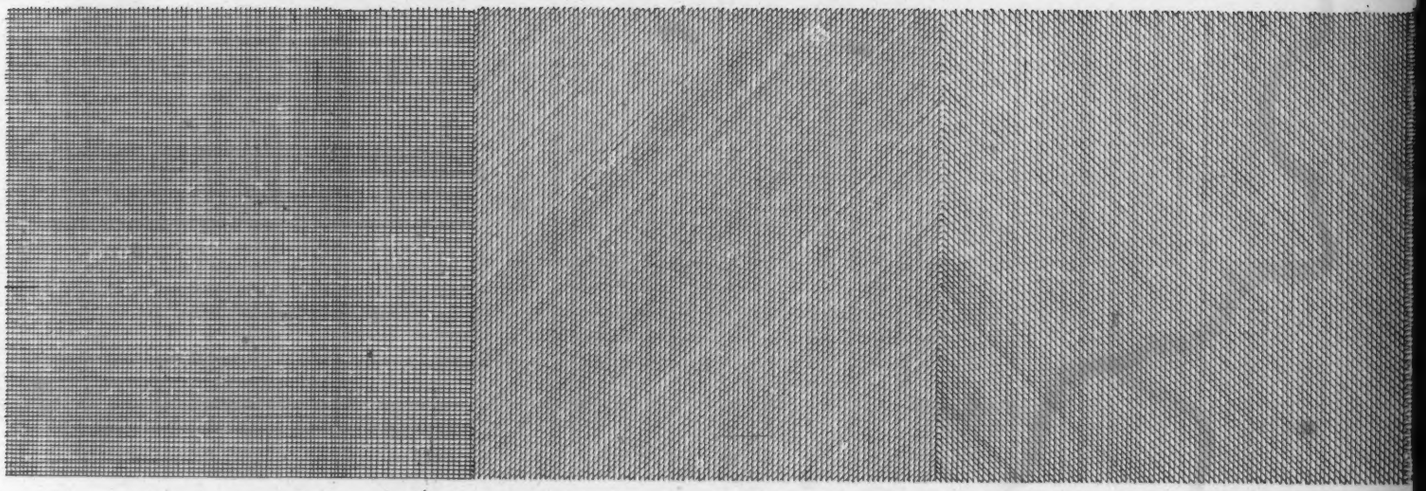
Drawing for three open cubes



Drawing for five open cubes

not exhibited

Drawing for the walldrawing at the Haags Gemeentemuseum



BLACK/HORIZONTAL	RED/DIAGONAL(L.TOP)	BLUE/DIAGONAL(R.TOP)	BLACK/HORIZONTAL	BLACK/HORIZONTAL	RED/DIAGONAL(L.TOP)	13' 4.29 m
YELLOW/VERTICAL	YELLOW/VERTICAL	YELLOW/VERTICAL	RED/DIAGONAL(L.BOT)	BLUE/DIAGONAL(R.BOT)	BLUE/DIAGONAL(L.BOT)	

72' 2"/23.83 m

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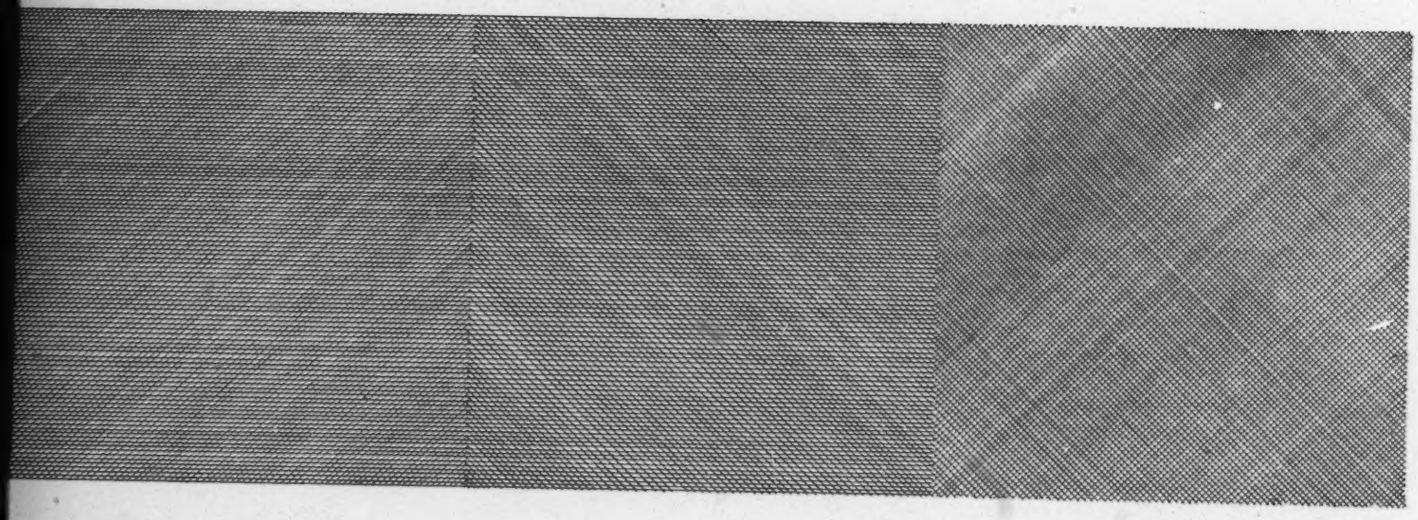

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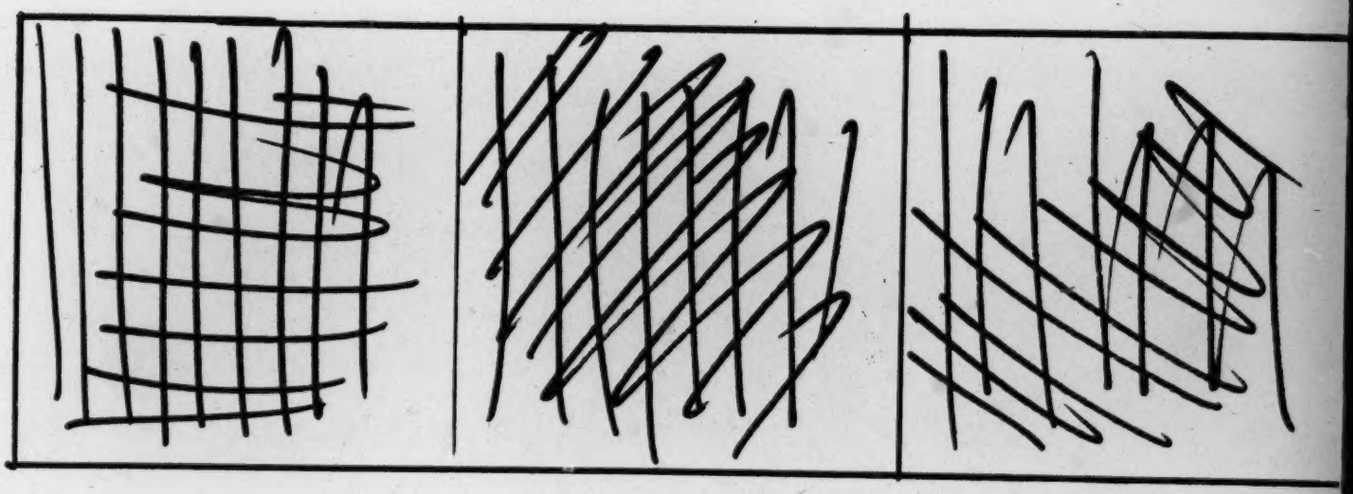

horizontal lines / black
vertical lines / yellow
diagonal l.r. / red
diagonal r.l. / blue

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'Don't loose your head,
your ass goes with it'

(Chester Himes, 'The Heat's On')

Carl Andre

Sol is our Spinoza

Terry Atkinson

One of Sol LeWitt's most clear qualities is his ability to take and examine an idea without having to ascertain whether or not the idea has a good artistic pedigree. My earliest meeting with him soon made this evident. This particular quality does, in my view, bear upon that further quality in the objects LeWitt makes, whereby the objects are suspended (i.e. 'warned-off') away from either an academic or anti-academic ambience; the emphasis is rather a non-academic one. For example, the wall drawings can be seen to exhibit the characteristic LeWittian 'anaesthetizing' of baroque operationalism; the surface of a smooth flat wall is an approriate matrix for quiet strategies, and these quiet strategies are the operations which reify the spin-off of quiet theories. It is perhaps more germane both to the work and to my respect of LeWitt as an artist to stay quiet. In LeWitt's case equate quietness with toughness . . . In LeWitt's work I tend to look more to the method rather than at the object.
February 1970.

Mel Bochner

Either Black or White (for Sol LeWitt)
Excerpts from previously published writings, 1966-1968

No artist can speak for another.
This acknowledged, my purpose in choosing to re-publish fragments of my own writings is twofold. The first is to re-present (unrevised) certain ideas which were being actively engaged when the art was initially exhibited. In so doing, I hope that problematic involvements which can be easily obliterated by the retrospective processes of historicizing will be exposed. On this point the value of what I wrote is that the thoughts, well or poorly expressed, were a contemporary response to the issue. Here I am well aware of falling short in many areas. Nowhere, for example, did I discuss color, something I now consider a central, if camouflaged, concern. To this and other limitations of thought and interest, I can only hope others will address themselves.
In the short time since LeWitt's work has entered the public domain many of his ideas have altered that body of existent visual knowledge from which we all draw. This brings me to the second and perhaps only real purpose for this compilation . . . the expression of my deep and lasting appreciation for the uncompromising beauty and rigorous intelligence of Sol LeWitt's art.

May, 1970, N.Y.C.

'Grid. Cube. White. Wood. Intersection. Joint. Obstruction. White wood grid cubes and other structures which are not cubes. On the floor. In corners. Against walls. Floor to wall. Wall to wall. Ceiling to floor. Their presence prevails over description. Sol LeWitt's white wood grid multiple structures are computations of interstices, joints, lines, corners, angles. They constantly permute. Binocular vision destroys regularity. Vision unlocks within impassable areas. There is no invitation. Formality is a guise. Space tenses: past, present-future, plural-present. Perceptual phenomena: indeterminate sequence, infinite invention, coordinate disorder. Everything is still. Everything is repeated. Everything is obvious. The accumulation of facts collapses perception. The indicated sum of these simple series is irreducible complexity. And impenetrable chaos. They astound.'
Exhibition review, *Arts Mag.*, Sept., 1966

'Art – from the root word *artificial* – is unreal, constructed, invented, predetermined, intellectual, make-believe, objective, contrived, useless. This work is dumb in the sense that it does not 'speak to you', yet subversive in that it points to the end of all Renaissance values. It is against comfortable aesthetic experience. But, what is ultimately most difficult for the art viewer of good faith to accept is the non-visuality – a concept at odds with all previous ideas of the art experience. Old art attempted to make the non-visible (energy, feelings) visual (marks). New art is attempting to make the non-visual (mathematics) visible (concrete). Invisibility is an element . . . This art deals with the surface of matter and avoids its 'heart'. It is unlifelike, not spontaneous, exclusive . . . It denies everything it asserts . . . Art is, after all, Nothing.'
'Primary Structures', *Arts Mag.*, June 1966

'An interesting aspect of some recent art is its conscious avoidance of anthropomorphic metaphor and the consequent tragic outlook. The works themselves are objective assertions. The attempt is to avoid metaphysics. That is not entirely possible, though, because the only way to avoid metaphysics completely would be not to do anything. But, as a basic premise, an empiricism has been substituted for emotionalism. Seaching for relationships is inventing them. No work has completely avoided that either, but some work has minimized it. In a world that is probably not more dehumanized than before, awareness of distance is a principle factor in functioning. Between objects are distances, not separations. That suggests a detachment that more or less excludes a formal approach . . .
Sol LeWitt's vertical cubic structure, which stands 'somewhere between my old work and what I am doing now', is completely open yet envelopes the room space it delineates. Inside-outside dichotomies are elemental. But LeWitt's is not a distinction between different qualities. It is a resolution of dualism entirely unlike Judd's. The arithmetic in LeWitt's drawing is his figuring for the cost of lumber to make the piece.'
'Art in Process - Structures', *Arts Mag.*, Sept. 1966

'Borges speaks of a labyrinth that is a straight line, invisible and unceasing. Overwhelming in its symmetries, the architecture of the Planetarium is more labyrinthian. Circular, insular, windowless, it renders the mind itself invisible. An artistic conception of the inconceivable, it conforms to no outer necessity. Edges blur as one tries to distinguish an outline. The ambulatories become an interstellar journey. Once such expectations occur, there no longer exist any realities. Just vague disorders and contingencies. The Planetarium becomes the same size as the universe; which it is. Perplexed, dizzied, one encounters a cosmic nostalgia. Vertigo at contemplating man's most futile gesture – patrimony of the infinite.'
'The Domain of the Great Bear', *Art Voices*, Fall issue, 1966

'Serial order is a method, not a style. The serial attitude is a concern with how order of a specific type is manifest. Many artists work in 'series'. That is, they make different versions of a basic theme; de Kooning's women or Morandi's bottles, for example. This falls outside the area of concern here. Three basic operating assumptions separate serially ordered works from multiple variants:

1. The derivation of the terms or interior divisions of the work is by means of a numerical or otherwise systematically predetermined process (permutation, progression, rotation, reversal).
2. The order takes precedence over the execution.
3. The completed work is fundamentally parsimonious and systematically self-exhausting.

Serial ideas have occured in numerous places and in various forms.
Muybridge's photographs are an instance of the serialization of time through the systematic subtraction of duration from event. Muybridge simultaneously photographed the same activity from 180°, 90°, 45° and printed the three sets of photographs parallel horizontally. By setting up alternative reading logics within a visually discontinuous sequence he completely fragmented perception into what Stockhausen called, in another context, a 'directionless time field' . . .
Sol LeWitt orders his floor pieces by permuting linear dimension and binary volumetric possibilities. Parts of his eighteen-piece Dwan Gallery (Los Angeles) exhibition could have appeared in one of three height variables, in one of two volumetric variables (in this case all were open) and in one of two positional variables, on a constant 3 x 3 square grid. The complexity and visual intricacy of this work seems almost a direct refutation of Whitehead's dictum that the higher the degree of abstraction the lower the degree of complexity. LeWitt's two-dimensional orthogonal grid placement system is related to the principles of order in mapmaking.
'The Serial Attitude', *Artforum*, December 1967

'For the solipsist reality is not enough. He denies anything outside the confines of his own mind. (Sartre refers to solipsims as 'the reef', for it 'amounts to saying that outside me nothing exists'. Schopenhauer speaks of the solipsist as 'a madman shut up in an impregnable blockhouse'.) Viewed within the boundaries of thought, the random dimensions of reality lose their qualities of extension. They become flat and static. Serial art in its highly abstract and ordered manipulation of thought is likewise self-contained and non-referential . . .
Sol LeWitt's serial work takes a particularly flat, nonemphatic position. His complex, multipart structures are a consequence of a rigid system of logic that excludes individual personality factors as much as possible. As a system it serves to enforce the boundaries of his art as 'things-in-the-world' separate from both maker and viewer . . .
When one encounters a LeWitt, although an order is immediately intuited, how to apprehend it is nowhere revealed. The pieces situate in centers usurping most of the common space, yet their total volume (the volume of the bar itself) is negligible. Their immediate presence in reality as separate and unrelated things is asserted by the demand that we go around them. What is most remarkable is that they are seen moment to moment spatially (due to a mental tabulation of the entirety of other views), yet do not cease at every moment to be flat.
Some may say, and justifiably, that there is a 'poetry' or 'power' or some other quality to this work that an approach like the above misses. But aspects like those exist for individuals and are difficult to communicate using conventional meanings for words. Others may claim that given this they are still bored. If this is the case, their boredom may be the product of being forced to view things not as sacred, but as they probably are – autonomous and different.'
'Serial Art, Systems, Solipsism', *Minimal Art Anthology*, Dutton (pub.), 1968

John N. Chandler

Tony Smith and Sol LeWitt: Mutations and Permutations

'Wallas examines all the machines. Each of them contains – placed on a series of glass trays, equidistant and superimposed – a column of earthenware plates with precisely the same culinary preparation on each one reproduced down to the last lettuce leaf. When a column is emptied, anonymous hands fill up the blanks from behind. Having reached the last dispenser, Wallas has not yet made up his mind. Besides, his selection is of slight importance, for the various dishes differ only by the arrangement of articles on the plate; the basic element is marinated herring.' [1]

The more things change, the more they remain the same; the more things remain the same, the more significant is the change. A number of recent works of art are like automat lunches where taste plays an unimportant role. A single work contains many pieces each of which contains the same or very similar elements arranged in different orders. The use of modules and interchangeable parts to make variable configurations may reflect the current scientific view of the modular cosmos as well as the mass production for the masses of contemporary technology. Artists with attitudes as different as Carl Andre, Mel Bochner, Eva Hesse, Ursula Meyer and Alejandro Puente are involved with variable arrangements of modular parts. Two recent sculpture exhibitions on different floors of 29 West 57th Street illustrate how artists of almost contradictory intentions are both involved with multipartite projects where the parts differ in order rather than in degree.

Tony Smith's *Wandering Rocks* and Sol LeWitt's *47 Three-Part Variations on 3 Different Kinds of Cubes* are the results of diametrical attitudes about art, but like opposite, alternate angles, though their orientation is different they are in other ways equal. The titles are the first clue to their differences. Smith gives his pieces names (*Smohawk*, *Crocus*, *Slide*, *Dud* and *Shaft*) as though once made they have their own identities with a familial relationship to each other. LeWitt rejects 'titles' for their aristocratic pretentiousness while at the same time denying the importance of individualism; he refers to the separate parts by their specifications (2f-2f-3r); he considers the parts as grammatical morphemes of the proposition.

LeWitt refers to his art as a 'conceptual art' in which 'the idea or concept is the most important aspect of the work'. Anything which might detract from the idea, such as great size, he would reject. For him, the idea is the generating function of the product: 'The idea is the machine that makes the art.' He wants the product to appeal to the viewer's mind rather than his eyes. Smith's art is meant not only for the sensation of the eye but also the other senses; his structures are to be felt or experienced. Smith, like David Hume, has rejected the Cartesian primacy of the reason over the emotions. As Cassirer wrote concerning Hume, 'Reason is summoned before the forum of sensation, of pure 'impression', and questioned regarding its claims. And the verdict is that all authority which pure reason had wielded had been unjust and unnatural, in short, had been usurped authority . . . Reason and the imagination have now changed sides in the controversy surrounding the foundations of aesthetics.' Smith once said, 'I want the thing to appeal directly to the unconscious – don't want people to have to think about it – if they do it is a failure.' His view that all science is science fiction is consistent with this Hume-like sceptism.

LeWitt's mechanistic rationalism is also evident in his process of making art. Once the idea has been formulated, whatever follows is out of the hands of the artist. It is unimportant to him if the idea produces something not visually pleasing, visually 'illogical'. 'The work does not have to be rejected if it does not look well.' During the process of execution the artist must refrain from making any changes. 'Caprice, taste and other whimsies would be eliminated from the making of art.' He gives the fabricator the specifications and stays out of the way. Smith, on the other hand, is a delightfully capricious and whimsical artist. Though he too has his finished work fabricated, Smith is very much 'at work' during the process of executing models and mock-ups, making radical changes until the piece has a look he likes. *Amaryllis* was the result of stopping after joining together two units which were to have been parts of a much larger piece; *Cigarette* was the result of tearing down a larger, unsatisfactory piece and stopping when arriving at this form. Unlike LeWitt, Smith is very much concerned with how his pieces look, even to the point of determining in what light they should be seen and in what surroundings they should stand. He prefers a leafy background and twilight or dawnlight; LeWitt has a contempt for trees and nature and thinks of space as cubic volumes or rooms and light as wattage or Dwanlight.

LeWitt is concerned with playing down the physicality and materiality of the work; consistent with his opinions of art as idea, he feels that the physical production of the work is perfunctory, something expected to be performed but actually unnecessary once the idea has been adequately expressed in sketches, drawings and models. 'The physicality of a threedimensional object becomes a contradiction to its non-emotive intent . . . Anything that calls attention to and interests the viewer in this physicality is a deterrant to our understanding of the idea and is used as an expressive device. The conceptual artist would want to

ameliorate this emphasis on materiality.' Smith, on the other hand, has emotive intent and his works have a physical presence. Even as a painter, Smith has always been interested in solids and the paced unfolding of surfaces. Though his sculpture is actually hollow, the hollowness has nothing to do with the intention and is not perceived by the viewer. LeWitt reduces the physicality of his work by often making the pieces open; his cubes are often not six-sided cubes but twelve-adged 'opens'. Smith has also used open forms (his *Smoke* is the best example), but when he does the scale is usually so large that the volumes and surfaces are no less physical, and paradoxically it is LeWitt's rather than Smith's open pieces which present physical barriers to the spectator. This is only an apparent paradox because, consistent with their intentions, LeWitt's work is presented mainly to the viewer's mind, whereas Smith's are presented to his body as well. LeWitt's is cerebral; Smith's is corpuscular. Smith has said that he is not interested so much in the internal relationships as in the silhouette; he wants his works to 'loom'.

In short, LeWitt's attitude is Apollonian, Smith's Dionysian; LeWitt's work emphasizes clarity, comprehensibility, self-containment, is passive, cool, rational, sober; Smith's emphasizes mystery, inscrutability, expressivness, is active, inflammatory, sensual, exuberant. LeWitt's harmony is consonance: the orderly structure of the whole in terms of the arrangement, progression and modulation of the parts. Smith's harmony, like that of the ancient Greeks, is the tension of opposites, the result of strife; Harmonia was the daughter of Love and War. In Smith's case the conflict is between modular regularity and organic variety; his art is the attempt to force the production of the latter out of the former. The stunning variety of his work is produced by the regular repetition of two regular solids. As a result of this agon and its resolution Smith's works are dramatic.

Michael Fried has focused on just this dramatic quality in his blanket condemnation of most good contemporary sculpture. He has not only attributed to the whole what is true of the part but has made much of the fallacy of the converted middle. Having established that Smith's work is dramatic, he proceeds to refer to it as theatrical, a word whose connotations better fit Fried's style than Smith's. Fried thinks that theatre is the 'negation of art', and that there is 'a need to defeat theatre', which he equates with a need to defeat *time*. This is a dramatic proposal – a cry to raise the colors and ride out and spray the fiery dragon. His windmills are clocks. Nevertheless, the universe is, as Buckminster Fuller has said, a 'nonsimultaneous configuration of events', and in spite of the promise of timelessness in the world of the dead, most contemporaries, in science, music, poetry, drama, prose, dance, film-making and sculpture are concerned with what George Kubler has called 'the shape of time'. But to say that everything has a time dimension is not to say that it is therefore dramatic (and certainly not theatrical). LeWitt's work can be seen as time exposures which register the transformation of the pieces in his series, but LeWitt's work is no more dramatic than a Greyhound Bus timetable. Neither the presence nor the absence of the dramatic in art is any guarantee of quality.

It is partly in their shared concern with time configurations that both Smith and LeWitt, in spite of their differences (which neither of them makes into a dogma or manifesto) belong to the present. They also have in common a prevalent awareness of a continuous three-dimensional space grid, or web, in which three-dimensional objects exist. LeWitt's grid is made of the Cartesian 90-degree coordinates, whereas Smith, who used to work in a right-angled framework, switched to a 60-degree space frame based on the tetrahedron which he discovered gave him a greater degree of flexibility and visual continuity. Smith said, 'We think in two dimensions – horizontally and vertically. Any angle off that is very hard to remember. For that reason I make models – drawings would be impossible.' In analyzing Smith's work I have found it imperative to make models of his pieces; it is only by doing this that I have been able to detect their underlying structure. On the other hand, LeWitt's right-angled pieces are easily visualized when they are described; since their appeal is directly to the mind, this is appropriate.

Tony Smith's recent sculpture uses basic crystal modules, tetrahedra and octahedra, ordered and arranged in structures which, though appearing asymmetrical and disordered, are often surprisingly symmetrical (though not bilaterally) when the hidden structural patterns are discovered. Though they have a sense of wholeness, they defy the powers of the visual imagination when seen from only one angle. If one looks at them from one position and then moves only a few feet, *'certain outlines are emphasized, others are blurred; here and there distances open out, unexpected masses appear; the whole view is organized into a series of planes silhouetted against one another, so that the depth, suddenly illuminated, seems to lose its natural look – and perhaps its reality – as if this overexactitude were possible only in painting. Distances are so affected that they become virtually unrecognizable, without it being possible to say in just what way they are being transformed: extended or telescoped – or both at once – unless they have acquired a new quality that has more to do with geometry . . .'*

Some of Smith's pieces have been so symmetrical that they can reproduce themselves by rotation, just as an equilateral triangle reproduces itself when rotated 120 degrees. Based on a continuous space grid, itself generated by the rotation of the basic modules, these structures can be seen as holes punched in a solid space constructed of these modules. Although a plane can be completely filled with equilateral triangles, three-dimensional space cannot be filled with tetrahedra alone, but requires the alternation of tetrahedra with octahedra. Though it might seem that sculpture made of only these two modules would have a limited number of possiblities, this is not at all the case, as Smith has already demonstrated; in fact, it is hard to visualize any limitation to the forms which can be made from this simple generating function.

Once the pattern is begun, the only choices remaining to Smith are when to change direction and when to stop. The piece almost makes itself, just as crystals form when a solution has become fixed. Even the changes of direction are limited to 60 degrees and 120 degrees. Another self-imposed limitation of this methods that all the surfaces will be parallel to the sides of the initial octahedron, though they may be in different planes. Except for one early piece (never exhibited) in which Smith used tetrahedra joined face to face to form a helix whose components rotate around a central imaginary straight line, all of his tetrahedral sculpture is cubically closet-packed. (In cubically closet-packed crystals the tetrahedra join only at their edges, so that if something is to be added to a tetrahedron's face it has to be an octahedron.)

These tetrahedra and octahedra are indiscernable in the finished work; no line shows where the elements are joined; a continuous ribbon of surface covers up all tracks to that the piece is seen as *'not a series of irrational, unrelated images, but a smooth band where each element immediately takes its place in the web, even the most fortuitous, even those that might at first seem absurd or threatening or anachronistic or deceptive; they all fall into place in good order, one beside the other, and the ribbon extends without flaw or excess, in time with the regular speed of footsteps'*. This is as true of a piece like *Cigarette*, where the parts are contiguous, as it is of *The Wandering Rocks*, where they are discontinuous and their relations are variable.

Smohawk is the basic composite module of all of Smith's tetrahedral sculpture – an octahedron with an adjacent tetrahedron. This conjunction forms a new seven-sided figure with four equilateral triangular faces and three rhombi, one of which is the base. As simple as this piece is, it has the visual complexity of the larger pieces, taking on a different appearance with each different point from which it is viewed.Even more radical changes in appearance would result by rotating the piece on its axis so that the tetrahedron, normally upright, is either inverted or transposed to the top of the octahedron. *Crocus* is actually *Smohawk* with an additional tetrahedron on top, producing, a six-sided solid with two triangular, two rhomboidal, and two trapezoidal faces. *Slide* has exactly the same components as *Crocus*, but they are arranged differently; the tetrahedron

is removed from the top and placed on the octahedron's face, parallel to and opposite the face where the first tetrahedron is joined. The solid thus has made six identical rhombic sides; a triclinic parallelepiped, it resembles a leaning cube, and like a cube it reproduces itself by rotation. *Shaft* is *Slide* with *Smohawk* sitting on top (or it is *Crocus* with *Smohawk* attached to its visible rhombus face). *Shaft* is a seven-sided solid with two trapezoids, two parallelograms, two triangles and a rhombus base; though it has very vertical look, it is actually longer than it is tall. If *Shaft* were laid on one of its parallelogram sides and *Smohawk* were added to it, *Dud* would result. *Dud* can also be seen as a *Slide* with a *Smohawk* on each end (one upright and one inverted), or as a *Crocus* similarly flanked by *Smohawks*. Thus all five *Wandering Rocks* relate in a non-hierarchical progression as well as structurally.

The *Rocks* are smaller than Smith's typical work. It is as though some cataclysmic event shattered a larger piece and produced these fragments which, like broken crystals, have retained necessarily a resemblance to the former piece. The viewer can pass between them causing them to change their appearance and their interrelations, or he can return on another day and find them, like shells on a beach, rearranged by the droll tides. Fabricated from steel, their finish is ambiguous. They can be seen as industrial, like cast metal, or as rocks, their former blackness greyed and greened with lichen.

LeWitt has used the cube as his basic element; each piece is the result of stacking three cubes. Three variations of the cube are used: one a solid or six-sided, one a five-sided box open at one vertical side, and one a four-sided sleeve open at opposite vertical sides. '*Here there is only what is strictly necessary: regular walls pierced with rectangular openings; it does not suggest poverty, only work and economy.*' Each piece uses a different combination of these elements; for example, one is three solids and another is two boxes and a solid. The placement of these elements also varies; in the combination of two boxes and a sleeve, the sleeve could be at the top or in the middle. Rotation produces further variations and further rotation eliminates others. Rotation on the vertical axis either of a single cube or a pair produces new variations. For example, the piece with the sleeve on top of two boxes could have all the openings face east, or the two box openings could face east and the sleeve openings north and south; the sleeve east and west and the boxes north, or one box south and the other west, etc. Such a scheme, if carried through, would produce a fantastic number of variations.

LeWitt has used a visual criterion to limit the number: if the rotation would result in a form visually (or tactilely) identical to one already produced, then it is not made. LeWitt sees this as a means of eliminating redundancy, but actually it is visual redundancy since conceptually the initial piece made of three solid cubes is not the same piece which would result by rotating its top cube. Visually they are redundant since the eye (or the touch) could not distinguish between them, but the mind, to which it is LeWitt's intention to appeal, can tell the difference. Nevertheless, this principle limits the number of pieces to 47, a large but manageable number. LeWitt, who prefers closed systems to open or infinite ones, has programmed into his formula the requirement to reject duplicates. Since his space, like absolute space, has no left or right, front or back, up or down, any piece which by any manipulation would generate an identical piece is rejected. This includes rotating the piece on its horizontal axis; for example, it might seem that the piece with the sleeve on top of two boxes would be a different piece than the one with the two boxes on top of a sleeve, but if this piece is turned upside down it is discovered that they are identical.

LeWitt has no mathematical formula for determining which pieces to make and which to reject, nor formula to tell him in advance how many pieces the system would generate. Unable to afford a computer, he worked this all out empirically while making the models. In fact, at the last moment, after the posters describing the show had been made, LeWitt discovered that by some confusion that had occured when placing his order, one of the possible pieces had not been made. He called his fabricator, who understood his code of specifications, and ordered the missing piece. For a recent show at the Galerie Bischofberger in Zurich he showed a variation on these variations; using only the open cubes without the solids; the total number of pieces in that series worked out to seven. Originally LeWitt planned to arrange these variations on a grid as he did his last major work. But he found the grid too confining, too tight, for this project. The 47 pieces don't arrange themselves very neatly on a square grid; there would have been a gap somewhere, a line of disorder in the midst of order. So he divided the grid into runways or rows with intervals between them. The pieces are arranged in these rows with the intervals between the pieces in a row equal in size to the bases of the pieces. '*The row is broken only at the perpendicular, identical crossroads.*' 'Regular space might also become a metric time element, a kind of regular beat or pulse. When the interval is kept regular whatever is irregular gains more importance', LeWitt has written.

The 47 varieties are arranged in groups or families: a set where the solids predominate contains five pieces, there are six in the set which has one of each kind of cube, the group in which the sleeves predominate contains fourteen variations and the box set has 22 representatives. The intervals between the groups is double the width of the base of the basic cube. Once having abandoned the presuppositions of previous work, LeWitt found the peculiar order inherent in the present work. This is not so much a rejection of his principle that once the idea is arrived at the artist should not make changes in the process of execution as it is the result of letting the idea have its head to determine its own arrangements, free from the artist's presuppositions. Or is it?

The current concern of artists with 'systems' recalls the rejection of systems by the eighteenth-century *philosophes*. The seventeenth-century philosophers, following the model of Euclid's *Elements*, constructed elaborate systems, long chains of deductive reasoning where every link depended upon all those which preceded it and upon which all further links depended. The eighteenth century, following the lead of Newton and natural philosophy, rejected this kind of deduction and rejected *a priori* systems. Rather than beginning with principles and arriving at particulars, the process was reversed. Knowledge became more elastic, open-ended and concrete. Since then, attempts to make systems have been negligible, and when they have been formulated, they have been useless. The formulator of a system of aesthetics has nothing to say to working artists because he has not observed the relevant phenomena – in this case contemporary works of art. Nevertheless, some of the most beautiful of human productions have been these philosophical systems. What is more beautiful than the systems of Aquinas, Spinoza, Hobbes and Descartes? Every part in its appropriate place, deduced from those prior and antecedent to those that follow, the whole being an attempt to reduce the apparent variety to unity. Even their uselessness enhances their aesthetic quality, just as a ruined Gothic cathedral is perhaps more a work of art now than it was when it was functional. Although systems are useless for philosophy and science, their inherent adaptability to art must now be evident. It is perhaps in art that systems have found their proper domain. Not all art should be systematic, but all systems are art.

A distinction should be made between 'system' and 'method'. Newton's 'Rules for Philosophizing' was a method, but one who followed Descartes' *Discourse on Method* would probably create a system. Schoenberg's twelve-tone technique is a method, not a system. A method is a means of obtaining an end and never an end in itself; a system is both a means and an end. D'Alembert, Condillac and other *philosophes* distinguished between *esprit systématique*, which valued methodological order, and *esprit de système*, the love of system for its own sake. There are different ways by which parts may be arranged in different ways, and they correspond to the *philosophes'* distinction: Smith's is the *esprit systématique* and LeWitt's the *esprit de système*.

Things take their immutable course. With calculated movements.'

[1] All italicized quotations are from Richard Howard's translation of Robbe-Grillet's **The Erasers**, Grove Press, 1964.

Enno Develing

Thoughts on Sol LeWitt's work

The most important issues about Sol LeWitt's work to me are: its involvement with a general environment in a non-dominating, non-hierarchical relationship, the temporary character of the wall-drawings which questions the eternal uniqueness and preciousness of art and the fact that underlying his mature work there always is a system, thus rather stressing the mental process than the finished object. All his work has a toughness, a concentration and a consistency which convinces without any doubt.

One would suspect his work to be more appreciated and understood by his fellow-artists than by critics and scholars, and judging by the number of articles in the trendy and commercial art magazines this may very well be true.

His work, being so open to perception lacks the mysteriousness as an object which is so attractive to commentators on art, because it gives them the opportunity to make their own dream come true, using the work of art as a pretext. In Sol's work the mysteriousness (if one would like to call it that) is not in the work itself but in the way each individual perceives the work. It demands an equivalence of perception and that is what many people involved in art do not like. They believe their perception to be superior to that of others.

I think this social issue in Sol's work is a very important one, because it keeps coming back in all various aspects of his work. This anti-authoritarian point of view, leaving everything and everybody in its or his own value, is basicly contrary to the structure of our whole society, which is strongly hierarchical, based on values and a domination of a mass of individuals by a limited number of individuals.

I find it impossible to exclude this consequence of Sol's art in my experience of it. The philosophical and social issues to me are much more important than the actual objects themselves. I find it hard to talk about them in terms of 'beautiful', though privately I probably do find them 'beautiful', but talking about art in these terms, in values, disguises the real issues of that art and those have nothing to do with beauty.

The wall drawings are a logical consequence of the earlier work and even more so stress the mental process underlying these works of art. The equivalent relationship between the wall drawings and the environment again show the anti-authoritarian character of Sol's work. The drawings in their own autonomy adapt themselves to the general qualities of the environment (size, texture of the wall, light elements etc.) which to me leads to consequences in a philosophical, social and political field, where either the environment (in a very general sense) dominates the individuals or individuals dominate the environment. Formal art has always played along with this, in fact it has always suppressed the public in a cultural sense as society did in a political sense. Much new work and certainly Sol's has moved away from this basicly collaborative situation.

The drawings will only last a certain amount of time. Being done in graphite they will be worn away relatively quickly. This seriously questions issues like the 'eternal values' of art and of course the gigantic business, stock-market exchange-like dealings in art objects. We live in a society which only accepts things that have an economical financial value. Ideals, ideas and philosophies are only valued if they can produce economical profits and art is very much involved in this. Art and artists are not appreciated by society; their products are (in conceptual art signed and legally certified statements) because of the economic value. With every new movement in art, artists try to get away from this abuse of their intellectual and artistic capacities. Society answers by accepting each new movement immediately, thus turning the art into commodity, ignoring all mental, philosophical, social, political etc. implications underlying that particular kind of art. The next result is that a few artists selected by the art business world (dealers, magazines, collectors, museums), become part of a production system which of course kills their art and their integrity as an artist. I think all this is relevant to Sol's walldrawings. I also think the fact that Sol still lives in the same loft as he did 10 years ago is relevant to his work and his position as an artist in present-day society.

A last point I would like to make is what I feel Sol does to facts. All his mature work is based on simple logical systems which can easily be understood by anybody. The works resulting from these systems however when perceived, though basicly as simple as the system, do appear to be complicated, illogical and irrational. Of course this is a generalisation, but I would say that Sol presents facts and shows us that from the point of perception there are no facts. This again raises questions about the value of things in general and the value of facts in particular. Just a mere fact does not mean a thing, unless you do something with it. This too has to do with information, a new slogan of the advanced arts and the media. As Carl Andre has pointed out: 'information is what teachers withhold from students. Information is what has already been processed by another human intellect' . . . (From 'Exchange', a conversation between Carl Andre and Dan Graham, unpublished). Information reinforces the status quo, it prevents any changes at all and keeps people from thinking individually. Facts, information have to be perceived individually and do not mean value judgements as in society.

I think that Sol's art reveals what is fundamentally wrong with the roots of art and society and it is impossible to isolate one from the other. It is my belief that an artist in his own work can contribute to a better understanding of changes necessary to arrive at a human society, which in an equivalent way represents interests of all individuals instead of an inhuman society which suppresses a large majority and represents interests of a few individuals. Sol's work in my opinion does make this contribution in a cultural sense and being involved in culture seems to me a meaningful human activity.

It may be interesting – especially in Sol's case since he feels 'all intervening steps, scribles, sketches, drawings, failed work, models, studies, thoughts, conversations are of interest' – to give some information (not processed by my mind, I hope) about the process of making and selecting the work for this exhibition. It is essential that an exhibition is to be organised exactly according to the concept of the artist. Of course, there is always room for discussion but it should basicly be the artist's decision which existing works are to be selected, which new work especially for the exhibition is to be done, where and how it all has to be installed in what order/arrangement etc., what is to be published in the catalogue, the lay-out, the photographs etc. Nothing should be done without the artitst's knowledge, without his permission and without his instruction. The curator is to be a mere bookkeeper carrying out the orders necessary for the organisation of the exhibition and administrating all work to be done. His 'creative', 'ideational' or personal contribution should be nil. At the exhibition itself he should try to supply as much documentary information on the artist's work as possible, so the public may learn the thinking progress, which precedes the art object and thus the object will not be separated from its mental implications. This may be realised with statements by the artist, lots of photographs of other works other than shown, information about the fabrication of works shown, about their underlying conception etc.

The concept for this exhibition was roughly discussed for the first time in October 1969 when Sol visited the museum on his way to Germany for his Krefeld exhibition. He only spent a few hours in the museum, looked at the space avail-

able for his show and inquired after the quality of the wall he had selected for the walldrawings, its dimensions, texture etc. He already said that he would also like to show the modular open cube structures, consisting of one single cube, as the basic element and offering variations of two, three, four and five cubes. He also thought of showing the two columns containing on its planes the complete system of 192 possibilities of sets of four wall-drawings.[1] The concept of the catalogue was discussed and he suggested to have as many contributions of different people as possible, so that his idea, that no permanent view on art is possible, would come through. He also said he wanted to publish as many photographs as possible, 9 on each page and all in the same size so that no work would appear to be more important than another. He himself would advise about the lay-out of the book. In the correspondence which followed all this was more or less confirmed and details, such as the exact dimensions of the rooms, were supplied. When asked about the size of the modular structures, he wrote 'large pieces should be as small as possible'. He also mentioned that he would like to do a colordrawing on the large wall and gave names and addresses of people he had asked to write for the catalogue (letter December 15, 1969). The letter also contained small sketches of his ideas for the lay-out, illustrating how it should and it should not be done.

In the next letter (January 6, 1970) he stressed that the catalogue should have as much documentation and information as possible – this would be possible by reproducing nine photographs on one page because: 'in this way many photos could be shown, and one would not appear to be superior because of a large size. Therefore, there would be space for more pages of writing'. He also explained about his idea for the cover: 'a 9 square division since it is important to much of my work'. He ended with: 'These are only suggestions that I think go along with my thinking. I am interested in making the catalog important (but not expensive).'

After this he explained about some things which were not clear yet (letter January 22, 1970), and as an answer to a question replied: 'I think you should write to the people for my catalog and ask them to write something on my work (not my personality)'. He stated he hoped to have five of the open modular pieces in the show and warned that he will need assistants to work on the wall-drawing. On February 16, 1970 he confirmed that no boards are to be mounted on the wall and some financial details were discussed. About the problem of who should do the wall-drawing he said 'I will show the people how to do the drawings as I showed H.H. (ED: Hans Hermann, who did drawings in Germany). These people may be art students . . . I think it will take 4 people 10 days or 2 weeks to do the wall. When the space is available they can begin and I will instruct them'. He also mentioned another work he liked to be shown: 'I may use an older work that I showed at Konrad's (Konrad Fischer, Düsseldorf) in 1968, 5 cubes containing hidden cubes.[2] It is an important work for me and will be reconstructed at Bergeijk, if they have time.' About the persons he asked to write he stated: 'I have asked so many people to write because they will all write something different. There is no correct perception, only personal ones. It is like the story of the blind men and the elephant – my work is the elephant and the people who perceive it are the blind men.' The concept for show and catalogue were pretty clear then and the next few months contacts were being made with all the people invited to write for the show. As Sol had announced a pile of photographs arrived from the Dwan Gallery, all to be used for the catalogue.

During a visit in New York early this year I visited Sol on Friday April 3, 1970, and on Wednesday April 8, 1970. Older and new work was shown, hundreds of photographs were leafed through and the ones not yet available were taken to be used for the catalogue. Eva Hesse's studio – she was in hospital for the third time then – was visited and an Italian photographer took pictures of her work. The place looked as if she had left it the day before. The exhibition and catalogue were rediscussed and Sol announced his arrival at the Hague sometime during the second half of May. The next day (April 9) Sol left with Carl Andre for Tokyo to take part in the Biennale.

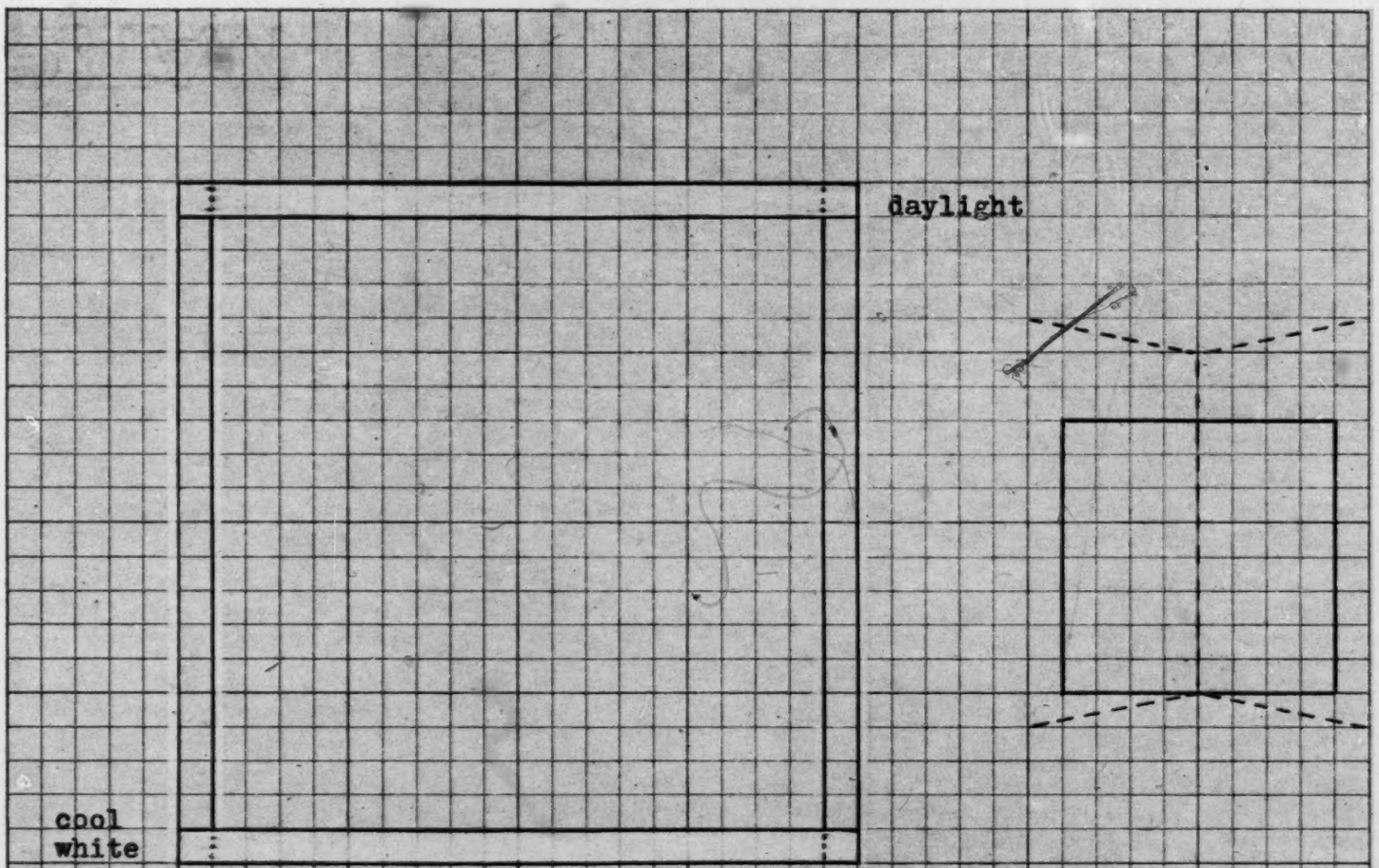
On May 25th Sol came to the museum. He carried a dummy of the catalogue for our lay-out man. Konrad Fischer, who was with him, left some new photographs and during the afternoon Sol checked the titles and dates of the photos and put them into the order they should be printed in the catalogue. He gave instructions where to borrow drawings to be shown at the exhibition and to be photographed and illustrated in the catalogue. Apart from the wall-drawing he would like to show as many paper-drawings as possible, all on the wall opposite the wall-drawing. He was going to do the proposal for the wall-drawing in Düsseldorf at Konrad Fischer's, where he was heading next. From there he would also send drawings for the open cube structures (to be printed in the catalogue) and other drawings for the show. He would also write about his latest projects. All this was received a week later with a lengthy letter with instructions for the lay-out (May 28, 1970). He commented on the enclosures and indicated where they ought to be put into the catalogue. He also announced the arrival of more photographs from Mr. Dick van der Net and from the Dwan Gallery. 'I should like to reiterate that I would like as much information in the catalog as possible even if the type size is reduced and the photo size is also reduced.' Then followed a suggestion for a quote to be printed and next instructions for the tools necessary to do the wall-drawing. His proposal was enclosed and excuted both in color (for the assistants) and in black and white (for the catalogue). He suggested the Artforum article by Rosalind Kraus to be translated and commented on this: 'I know a lot of people dislike my work and they would have some say in the catalog. If there are any other infavorable reviews you know about and want to use it is OK with me'. On the catalogue he said: 'I hope that there is not too much material and that none has to be excluded or cut, so I'd rather use a more condensed or smaller type fact to get it all in. I want as much information both objective (photos, drawings) and subjective (statements) as possible.'

All instructions were carried out. Next came a letter of June 2, 1970, from Paris. It began: 'Dear Enno, Eva Hesse has died in New York. She was my best friend and a great artist. I want to dedicate my show in The Hague to her and on the first page of the catalog to say 'this exhibition is for Eva Hesse'. He explained he was doing a wall-drawing for her in the Galerie Yvon Lambert and he hoped it could be used in the catalog 'on the first right hand page after the dedication page. The drawing is in black lead and free hand (no straight lines) vertical lines, very many. I want to do this drawing again in Den Haag'. That is where we are now. I also hope the photograph will arrive in time to be used for the catalogue. As should some other material. Of course there is plenty already, but there could be some very interesting items added to it.

In the meantime a team of local draughtsmen have been formed and an experienced extra one from England has been added. All preparations have been made. The present exhibition in the space for Sol's show will end July 12th. On that day Soll will arrive at The Hague and the work on the 4 x 24 m drawing will begin Monday afternoon July 13th.

[1] Later it appeared this was not possible.

[2] Unfortunately this was not possible owing to a too late order to fabricate the piece.



untitled (to dear durable Sol from Stephen, Sonja and Dan)

1970

daylight and cool white fluorescent light

8 feet square

from the exposition "New York Painting and Sculpture: 1940-1970"
The Metropolitan Museum of Art, New York
October 15, 1969 - February 8, 1970

Dan Graham

Thoughts On Two Structures

Sol LeWitt's work is for me the best abstract art recently. Most American art has been concerned with its physicality, thus making LeWitt's art rather unique. Despite what the artist might think, to my mind Sol's art appears a perceptible quality; its 'subject matter' (his 'idea') realized in it's in-forming methodology. The methodology (not the 'idea') is what is most radical about his work.

There were two similiar in appearance (related) structures exhibited at Park Gallery in 1966. These consisted of cubic lattices of interlocking, identical open-framed cubic cells: on 58", the other 60" in over-all dimensions. Each structure was placed on a surrounding, finite two-dimensional taped grid on the floor. The grid in its articulated form, like the present lattice-work, was simultaneously a two-dimensional and a three-dimensional representation both of the entire space of the interior enclosure (the gallery room) and also of itself as idea beginning from a line.

first the artist defines meaning / then the work takes place
As the structure is self-supporting in place as fact, so is the logic. It defines itself volumetrically and conceptually by extension as it defines the larger limits of the enclosing context; it takes its own measure; the work is a measure of its place – of itself as placed.
The structure is defined in terms of measurement: a scale of outer and inner distances (*literally outside* the over-all spatial enclosure as opposed to the 'illusory' space of the past or of what is presumed to be 'in the head'). Conceptually there is a parallelscale of distances defined: the distance in the room contained/containing the art object and that between the viewing subject

and the viewed object is transformable to the concept of (an) art 'distance' between *object, concept* and *viewer's place* and *place in the artist's mind* (in the past) to (have) take(n) place – i.e. how did *it* get there? (One becomes somehow aware that the notion of the grid is to begin with hypostulated/hypostatized – arbitrary – int the nature of first definitions.)
The informing relationship – by definition – is human (in some sense related to the older architectural notion of scale): the fact of the bars literally baring the human viewer access in the interior of each of the structures has a defining 'distancing' effect, and when (necessarily) viewed from their outside by the human participant the bars 'focus' reads as intervals in the hypostulated/hypostalized outmogonal perspective of a spatial context larger than itself: appearing to 'project' transparently 'through' the transfixed viewer-reader.

the work conjugates itself

For the viewer stationed in place there is a single frame of reference, as each two-dimensional frame extends self-referrentially only as far as its three-dimensionality (three-dimensional representation).

there is no single frame of reference / the work conjugates itself

As soon as the viewer moves, time begins and the exterior 'space' is abolished in terms of extension; the entire 'interior' ensemble of permutations and relationships of two-dimensional and three-dimensional representations become nearly simultaneously available as 'perspectives' without spatial density or location.
As the viewer moves from point to point about the art object, the physical continuity of the walk is translated into illusive, self-representing depth: the visual complication of representations 'develops' a discrete, non-progressive space and time.

there is no distinction between subject and object

object is		*subject is*
	and	
the viewer		the viewer
the art		the art

Object and subject are not dialectical oppositions, but one self-contained identity: reversible interior and exterior termini. All frames of reference read simultaneously: object/subject. The viewer as object/subject views subjectively/objectively a subjective/objective literal exterior spatial 'ilussion'/'reality' . . .
With LeWitt the form is reflective of both its own *de facto* situation of enclosure and as a *logical representation* of this idea, mirroring this idea at all levels of language, logic and facts. Its 'subject matter' (spatial, conceptual and representational) is this self-relational logic: if one translates the 'subject matter' to the perceptual appearance of the object, the distinction between 'subject' and 'object' is negated; just as, in the observed 'reality', the structure has placed everything 'inside' and at the same time 'outside' everything – as the mirroring contingent walls may be alternately read as 'interior' or 'exterior'. There is no center, no 'interior' perspective. Self-reference within any structural system (here a system of representation) necessarily creates an infinite regress of self-reflection. (A good example in logic of this is in the paradoxical statement of Epimenides the Cretan in which he says that all Cretans are liars. A structure of sub-divided self-reference, transparently intelligible at the outset, in its extension into complexity reaches a sort of inertia or logical indifference.)
The premise of LeWitt's Park Place piece(s) was next extended to a more complex articulation involving a serially extended reading process in a set of structures for 4 discrete interiors, although exhibited as small-scale models first (one set was built and exhibited full-scale as a show in Los Angeles at Dwan Gallery in 1967 and full-scale variations derived from pieces in the overall system were exhibited at various times in various places). The logical first premise of this series is the grammatically represented relation of the enclosure of one thing within another thing, arranged on a grid so that the ensemble of parts are placed equivalently within the interior space of the gallery. The 4 sets exhaust the dialectics of mass-space placements of a cube within a cube: outside open/inside open; outside closed/inside open; outside open/inside closed; outside closed/inside closed. There are 3 variables in terms of height: low, medium and high. The entire series is based upon 2 measurements: 28″ and 81″. Each set is based also upon a 9-square grid, which enables squaring a square within a square without adjacent edges. Mathematically, it is possible to translate the formal units into each other within the logic of the finite series created by the premise.
The control of such a complex of interdependent relationships by rigid *a priori* means was employed to eliminate both 'composition' and manual intrusion on the part of the artist just as the square within the square subject matter repeats the conceptual necessity mirroring the work's placement in a gallery environment.
Total serialization of relations produces an autonomous, self-contained structure the method is 'unseeing'; nothing adds up to the whole 'picture'; all expressive or 'interesting' effects – incident – is eliminated. Also the elimination of the usual linear reading of sculpture by the viewer produces no 'growth' (projected movement) regulating the parts in a progressive, sequential order. Instead, autonomy is given to a set of discrete levels. Each group is thus autonomous to its own level and still part of an equally discrete larger level until the 'highest' level of related levels is reached, which is also complete and self-contained. This may be read or arrived at in whatever in-formation time order the viewer *himself* brings to it. Serial procedures produce non-hierarchical and non-centralized orders, so they impose no principle of dominance or subordination, no hierarchy of levels: the whole is neither greater nor lesser in importance to the reading than its devision into sub-sets. The logic is absolutely efficient. Each spatial relationship can be represented by discrete numerical values so that the series of works is built from the simple multiplication or addition of the sum of the smallest unit common to all the interlocking dimensions. This has the virtue of neutralizing horizontal or vertical biases (common to a traditional sculptural reading – i.e. 'meaning') to a common proportion which regulates every spatial element – inside to outside, height to width progressions, etc. . .
In LeWitt's structures it is the *interval;* manifested paradoxically in those parts of the grid the artist's system chooses to 'objectify' as space-occupying, articulated presence – which gives the work substance. This is opposed to the usual artistic pre-occupation with *'space';* for LeWitt 'space' may be read more simply as air.
A 'spin-off' of the series appeared in the Konrad Fischer Gallery in 1967. Here the viewer can not see a hidden cube within a cube although the grid upon which the ensemble is placed and the implied relation of the parts to an implied 'whole' provided clues to a possible reading; in the relation of the viewer's reading (information relating to/relating the variations) to the 'content' of the work a sort of 'detective story' – 'Jap' Johnsian logic reading backwards induces 'content' as the system is read (deduced) from the clues of grammatical subdivision – i.e parts and parts related to whole – as the 'subject matter' (as distinct from the 'content'), read as the differences between the parts by the viewer, is translated (back) into the system (as 'content') inverting (in time sequence) the artist's own process of mental construction. The optical-locomotive reading process – contingent on the literal point-to-point presence – occupancy – of the work by the reader-viewer (not the work) is the locus of evolved past order (the artist's concept) and evolving future order (the viewer's conceiving of the work).

Coosje Kapteyn-van Bruggen

In May 1969 at Konrad Fischer's I first saw two wall drawings by Sol LeWitt, which were drawn with hard graphite directly on the long, white-plastered side-walls of the narrow gallery.
On the right-hand wall there was a square of 250 cm, subdivided into four contiguous small squares, each with a different value, caused by the four absolute directions of straight line: 1-vertical, 2-horizontal, 3-diagonal left to right, 4-diagonal right to left.
Sol LeWitt used this square as a basis for four variable systems of four squares. He consciously limited his choice to four and the accent of this recurrent number makes 'four' to a magic unity in his work.
With some assistance he made a rectangular tonal drawing on the other wall, which – without subdivisions – continued at eye level along the total length of the wall, and consisted of a combination of the lines 1, 3 and 4 (1-vertical, 3 and 4 diagonal) closely together and very lightly drawn, in order to merge visually with the wall surface as much as possible.
The proportions, colour, the material of the wall and its imperfections were a necessary part of the drawing and conversely the drawing seemed a natural part of the wall. Drawing and wall had become integral parts of each other.
Why did Sol LeWitt draw directly on the wall? He wanted to make an entirely two-dimensional work, only to show what is on the surface of the wall, in order to make clear that his two-dimensional works are a manifestation of an idea and should not be considered as objects. A drawing made on even the flimsiest piece of paper and then stuck on to the wall would remain an object. Moreover, a wall is an extremely well-chosen medium for direct communication. Walls are public and words on walls are there for whoever wants to read them. With his wall drawings Sol LeWitt offers an optimum possibility for communication. He invites to join in a game of which the contents is completely clear. The starting point of the whole system of which his work consists is the original idea, not complex but as simple as possible. Once this idea has obtained its definite form he allows it to find its own destination in a logical and almost mechanical manner.
The final result is not the most interesting, but the idea at the beginning, not based on a series of rational thoughts but on intuition. With that the subtlety with which the artist chooses and his feeling for gradations in tonality of the lines make it a treat to look at his works.
I did not intend to give here a review of Sol LeWitt's total work, for beside his two-dimensional drawings there are three-dimensional sculptures, the series of open and closed cubes.
It is only an attempt to search for the intention of the artist through a direct contact with his work, in this case the wall drawings.
With the fading of the drawings and the scrubbing of the walls my words are wiped out too. They appear to be only a day-dreaming afterwards of something that does not longer exist.
To Sol LeWitt a new exhibition means the showing of new ideas, the impartation of his latest thoughts. That opens up everything again for a direct communication with his new work, which may call up new words, that may be wiped out in their turn.

Sol LeWitt,

I have seen your work.
I have seen your work change.
I have seen your work grow.
I have seen your work.

Now it's there, where you put it.
Now it extends itself unto us.
Now we have grown to see it.

Thankyou for your request.
Thankyou for Sol's
Sincerely
Eva Hesse

Michael Kirby

'I've known Sol LeWitt . . .'

I've known Sol LeWitt since he was painting still-lives. That's a long time. Because we've been friends for so long, I can't write about his work in my usual impersonal and objective way. (That is, I usually *try* to be impersonal and objective; this time I'm not even trying.) Perhaps it is just that so many people have written and are writing about what he does that I'm not very confident about saying something that hasn't been said. So I'll write about how knowing Sol has effected my experience of his work. That way, it may at least *sound* as if it is different.

You can certainly learn a lot about art by knowing artists. (Sometimes I think it's the only way to learn about art.) I don't mean amateur psychoanalysis. I wouldn't tell you about Sol's kinks, even if he had any. And this is not a biography of the artist. I'm not going to tell you about Sol's ex-wife (whom I never met); or his girlfriends (whom I have); or his cat, Puss (who's also known him for a long time);or his interest in sports; and so forth.

The point is what I see myself – along with quite a few other people, because Sol has lots of friends – as a kind of a test case for one aspect of his work. You see, I usually know about his shows *before* they are made. In the old days, I could have said I saw the work before it was exhibited. Now I just say that I know what it's going to be like before the show goes up. He may talk about it or show me drawings or models. I'll get an idea of the concept involved. This is sort of significant because people (like Sol) call it 'conceptual art'.

So I have an entirely different experience of one of Sol's shows than a person does who knows nothing about the concept beforehand. I imagine them trying to figure out the rules, reading stuff about the show and so on. Probably some of them figure it out and some don't. I don't really think it matters. (It might, of course, if you happen to be an artist or a critic, but that's something else.)

The really fantastic and interesting thing to me is that, even though I have known the concept of the exhibitions (I'm talking about the more recent ones in New York – I don't get around to all those other places), I really could not and did not anticipate what the experience of the work would be like. It was always entirely different than what I expected.

Maybe you will say that's my fault – that I'm stupid or something. But I think Sol has the same experience. I think he is, in a sense, surprised when he sees the finished work. Words or a sketch or a model may have the same concept as the show, but the results, in terms of experience, are vastly different. I think it is very important to Sol's work that the experience can't be predicted, even by himself. He could, of course, 'try out' the experience ahead of time and – like an abstract expressionist painter throwing away most of his canvases because they didn't 'work' – only give us (and himself) those experiences that he knew and approved, but he doesn't do that.

Now don't think that I'm saying that Sol doesn't know and/or approve of his work. I'm saying at least two things: (1) that the concept is not the experience, and (2) that there is a tension between the predicted and the unpredicted – between the controlled and the generated – in Sol's work. The unpredicted is not there because he couldn't, if he wanted to, 'control' it. It is there because his way of working allows it, and he accepts it without evaluating it. The rules may be more noticeable than the acceptance, but I don't think they are more important.

Sol's works are all thought out, but there is more to them than the thinking. The rules (or the concept) control the physical facts, but these facts generate experience that is not conceptual. Perhaps the experience is sensory (sculptural, pictorial, etc.), perhaps it relates to your expectancy of what sculpture or painting has been or should be. The concepts are simple, but the experience of the finished work is not.

Let's take the most obvious example: scale. The decision is made to, say, fill the Dwan gallery with rows of columns or to make drawings directly upon the walls. The rules for the columns or the drawings are independent of the gallery space: these rules could be the basis for pieces of any size, and they would not change. In the exhibition, however, the size (scale) of the pieces is directly determined by the particular space, and the particular experience takes on non-conceptual aspects that were not there in the models and drawings. These come not merely from the given size or scale as opposed to all other possible sizes and scales but from a relationship with the space and place. The polemics of the wall drawings, for example, become intensified by the memory of all those paintings that had *hung* on the same walls - it wouldn't have been quite the same in most other places.)

So, in thinking of Sol LeWitt as a conceptual artist, I emphasize the art rather than the concept. The concept is just one way for him to work on a painting or a piece of sculpture. It's necessary, but it is not intended to stand by itself. When you look at them by themselves, I don't think Sol's concepts are particularly interesting. But he turns them into great art. I think this apparent contradiction explains a lot about his work. And I've certainly appreciated the opportunity to see something of the working process as well as the finished product.

Thanks, Sol!

Rosalind Kraus

Behind Sol LeWitt's latest sculpture, *47 Three-Part Variations on 3 Different Kinds of Cubes*, lurks the idea that even though the individual elements from which works of art are built are in themselves empty and meaningless, they are not irretrievably so. With enough vigilance and enough rigor one can render them meaningful by making them integers of a logical system – a system whose own lucidity will permeate the lifeless skin of otherwise dead forms, filling them with meaning. Faced with the sculptural poverty of LeWitt's work, one tends to think of 19th-century academic painting, where it was hoped that a similar kind of formal vacuum could be filled with a clearly defined and delimited kind of content.

The one sculpture, which entirely fills a room of the Dawn Gallery, represents the finite series of unique combinations and permutations possible, given a predetermined set of rules. The system is made up of stacks of units of a standard size: a 15-inch cube of which there are three types (closed, open on two opposite sides, and open on one side only – three types which represent the only topologically distinct variations which a cube can yield); and a standard unit of combination: a stack three cubes high. The variables of the problem of combination and permutation which determines the system are a) the possible orientations, and b) the possible placements of each kind of cube within any one stack. The stacks are ranged in eight rows, each successive row setting out the possible solutions in a fixed order of permutation. That is, the first row establishes all the possible permutations when each stack contains only one of the three kinds of cubes. (Within this and the following rows, variations in orientation precede variations in placement.) The second row establishes all instances when the first type of cube is the predominant member of the stack; the third and fourth rows do the same for the cases where the second type of cube is the predominant member; and the last four rows exhibit the number of possibilities given the predominance of the third type of cube. LeWitt maintains the integrity of each row's completeness as a sub-set within the over-all system by mounting the members of that row on a continuous strip running along the floor of the gallery.

Although this strip only functions within LeWitt's system like some kind of abstract connective tissue – like the words 'after' of 'between' for which there are no corresponding objects in the world – and is therefore logically irrelevant to the system, the presence of the strip is central to the *actual* experience of viewing the sculpture. Stationed along the strip like so many members of a regiment, the stacks of cubes appear rooted to the ground and responsive to gravity in the same way the viewer's body is. In fact their actual orientation to the ground appears to be the most important thing about them. But here the viewer and his experience are at irremediable odds with the 'logic' of LeWitt's system. For one of the rules of the system is that orientation to the ground is irrelevant. So, for example, if the only legitimate variation on the series *abb* is *bab* and not also *bba* it is because the last term is the same as the first turned upside down. Standing in front of the stacks of boxes, with their appearance of earthbound, monolithic stolidness, one might wonder where this hypothetical rotation (the proof that *bba* = *abb*) might take place. And the obvious answer is: in the mind.

The stacks of boxes are not meant then as physical things at all but as intellectual integers whose real existence is mental. The argument toward which LeWitt's sculpture points, an argument that meanings are mental entities which somehow attach themselves to real objects is not only philosophically naive but is, as well, part of a long-standing esthetic dialogue that is noteworthy for its peculiar irrelevance to the formal insights which have generated the best painting and sculpture of the present and recent past.

It is a dialogue that was opened by the Action theory of painting which maintained that every mark on the surface of a canvas could be – and in a successful painting was – a carrier of meaning. The most vehement counter to this theoretical assumption was embodied in the paintings and combines of Rauschenberg which again and again undertook to flush into the open, to expose, the essential meaninglessness of images. His strategy was similar to that of a speaker who by repeating a word over and over again manages to render it into noise. By actually experiencing a word as noise he produces in himself the sensation of meaninglessness, the feeling that word and meaning have parted company.

As images nudge each other within the confines of Rauschenberg's canvases they seem to be insisting on the pointlessness of trying to see relationships between them. There *are* relationships between objects or images in his works – relationships generated by similarities of shape, or similarities of function, or similarities of substance – all of them put there by Rauschenberg himself. But if after noting the similarities one tries to *read* the painting by means of them, the result is nonsense. And in the harsh glare generated by the futility of this attempt at 'reading', each individual image seems to have been stripped of whatever shroud of associations, or roles within a convention, which might have been the source of its meaning. By putting into question its power to represent anything Rauschenberg seems to have undermined the image's capacity to mean.

Rauschenberg's demonstration of meaninglessness stems from two notions: first, that pictures depend for their legibility on functioning of images as signs, and like a set of words, images and ultimately whole pictures are meant to be read; and second, that the conventions of painting are no longer adequate to the task of breathing meaning into lifeless, inert signs. But the fact that Rauschenberg's questions about meaning are couched in a particular visual grammar (that of Cubism), makes it apparent that Rauschenberg's very question, with its accompanying notions about words and images, is somehow specious. For, as it has been demonstrated by the most ambitious recent painting, it is in the grammar itself that answers to such questions lie.

Sol LeWitt represents the second generation of this debate about meaning; and he comes to it equipped with the completeness or totality of a mathematical system to fill in the absence of meaning left by Rauschenberg's 'proof'. There are many questions one might want to ask about this new systematic totality, questions like: where does this new totality reside. Is it in the diagram of the systems which the viewer can take in at one glance? Or in the title *47-Three-Part-Variations-on-3-Different-Kinds-of-Cubes* pronounced as one word? Or the mathematical formulation which determines the series which one carries around in one's head and presumably recites as one moves up and down the row of stacks? And how do any of these meanings attach themselves to the boxes? But there is really only one question that is finally relevant and that is: what does this cumbrous, mechanical joining or filling of content with form have to do with the enterprise of art?

From: *Art Forum*, vol. 16, no. 8, April 1968, pp. 57.

Ira Licht

While many of his colleagues have been seeking to redefine sculpture, Sol LeWitt has been ignoring it. His art until recently has been three-dimensional, yet 'form itself is of very limited importance'. Form in sculpture implies invention, subjectivity, emotion, associations beyond that which is physically present. By these definitions, LeWitt is not a sculptor. If creativity means intuition and formal novelty, then he is hardly an artist at all. LeWitt's forms have been, since 1965, the straight line and the right angle, the square and the cube. Logic objectified as structure; scientia more than ars. These forms already exist; they are familiar, simple, regular, legible, logical and capable of permutation within a group without distracting from the overall presentation of the set. Interest is transferred outside the individual integers into the series, and formal relationships occur between instead of within the components.

Seriality is Le Witt's modus operandi and guarantee of logic. Much has been claimed of late for artists such as Stella, Noland, and Bell who, though they may work in series, i.e. groups of repeated images, do not work serially.

LeWitt's art is truly serial: it employs mathematical systems with exact numbers of possiblities, and each series proceeds in linear and logical fashion from a specific generative idea to a predictable conclusion. The series itself in its inevitable development is the art, substituting a system of planned permutations for the hierarchical combinational methods of the past, and the art is pure information. If each term of the series must influence the others, for example by eliminating the possibility of a repeat, and if 'information is that which removes prior uncertainty', then LeWitt's art provides more and purer information than any before.

In this context though, the logic of the series becomes paradoxical. For the series should offer progressively less interest as the possibilities are lessened, the uncertainties are gradually all removed, and no more information is to be drawn from the piece. But paradoxes of logic are LeWitt's mothers tongue. He recognizes the contradictions which arise when rationalism as an abstract intellectual construct is imposed on human nature, and explores the confrontation of the two modes. He creates situations similar, for example, to the use of retrograde-inversion in serial music, where the absolute logic of the device can be aurally perceived only by the most sophisticated few. For the rest of us, logic defies perception.

LeWitt has written of ideas which are: 'logical in conception and illogical perceptually'. His *Serial Project no. 1, 1966* traced the clear sequential development of interacting sets of open and closed geometric elements to visually illogical results – totally enclosed forms, the presence of which had to be taken on faith. LeWitt is challenging our intuitive reactions to art – to earlier art which was conceived emotionally and intended to be apprehended subjectively – and proposing instead a rational arrangement of facts for intellectual comprehension. Meanwhile, he works with the area of contradiction.

47 Three-Part Variations on Three Different Kinds of Cubes strained one's capacity tot sustain the lucid and rational development of a single idea through fewer than fifty terms. Though the parts individually, as well as their structure as a group, always remained cogent and intelligible, the quantity of parts overwhelmed logical analysis and the general response was to a supposed illogical complexity of the whole, compounding individual facts into subjective confusion, and finding qualities and references beyond that which was objectively present and comprehensible. The subjective whole is not only greater than but of quite another order from the sum of its objective parts. The cumulative effect of a set may seem unintelligible or obsessional as here where the intensity of the multiplicity generated additional qualities not present in the integers. The series accumulates and transfers energies along the line; the insistent, ongoing rhythm binds together the components and beats through the group setting up reverberations beyond the manifest forms and relationships. Even fully revealed, clear and logical information can't deny mysteries and meanings brought to it by subjective interpretation.

Despite the static individual forms, a marked sense of developing time passes through the set. Besides the irrational nature of one's perception of the facts visible throughout the operation, there is the unknown character of the operation itself. As with the 19th century experiments in sequential photography of Eadweard Muybridge, one becomes involved after a while with the measured intervals between the known facts – with the unknown quantity of what happens between the visible and logical steps. Muybridge's innovations were earlier of some importance to LeWitt; his last paintings, of 1962, and the 1964 'peep show' boxes adapted his imagery. In fact, the 'peep shows' even approached a cinematic mode through the use of flashing lights to bring about visual inertia: the momentary lingering in the mind of one image until it merges into the next. And Muybridge's serial principles – rather than those of, for instance, Schönberg, about whom LeWitt is equally knowledgeable – seem still to inform the work. Indeed, one can find in such a piece as the *47 Three-Part Variations* a cinematic sensibility akin to Muybridge's, and it is also this to which LeWitt's art owes much of its significance. Film has largely shaped the modern experience and it demands a multiplicity of visual stimuli temporally ordered. LeWitt's comprehension and easy accommodation of the cinematic attitude is total, yet he yields nothing of the originality and integrity of his individual style and thought.

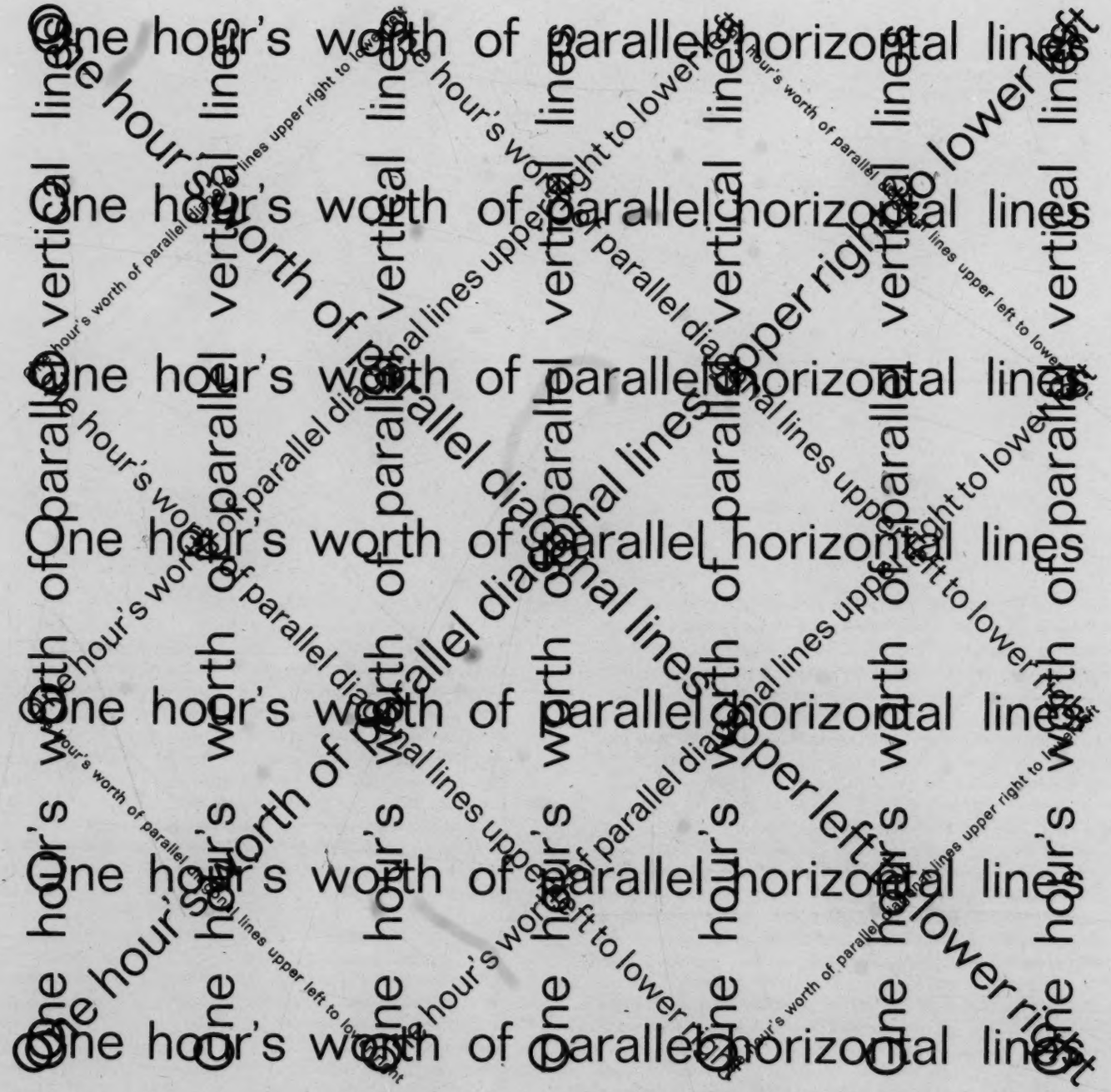
Perhaps the cinematic essence of LeWitt's art does not offer itself readily to all viewers since he presents an evolving concept rather than images, and the cubiform components are so rigid. Yet the square structures in serial permutation, like film frames even in basic shape – the layout of Muybridge's photos may perhaps have influenced the grid format of so much of LeWitt's work too – develop an inexorable time. The frames per second ratio may be too slow to blur into apparent motion but, Muybridge-like, change is frozen in time, the separate instances of the transformation permanently recorded, and one can linger among the individual moments. In fact, one can walk among the parts, inside their time, irrationally superimposing our own time on the regular pace of the art. And our presence as both participant and spectator in the temporal scheme (simultaneously acting in and watching the 'film') underlines the conceptual and paradoxical qualities of the work.

Sol LeWitt's art rules time – commands and measures it – and his art of facts and objective logic becomes for the viewer a subjective experience of the geometry of time as he is placed 'in the space of time'.

Lucy R. Lippard

Imitation = Homage

LRL to SL


One hour's worth of parallel horizontal lines
One hour's worth of parallel vertical lines
One hour's worth of parallel diagonal lines upper left to lower right
One hour's worth of parallel diagonal lines upper right to lower left

Dick van der Net

The artist Sol LeWitt holds the view that the way his work is executed, has an extreme importance for the final result. That is why I gladly comply with his request to write about this aspect of his work. Sol LeWitt's pieces lend themselves admirably to production at a factory because of the following reasons:

Thanks to the form and surface treatment of the work the pieces can be done in such a way that any 'fortuity' possibly occurring during the production process, is eliminated.

This exclusion of 'fortuity' facilitates the distinct formulation of the artist's requirements. This simplifies production considerably.

Most pieces (for instance, the Serial Project) have a distinct system of permanent form-elements, offering interchangeable combinations to themselves. These combinations, each forming a piece in their own right, are put into a formular consisting of a number of digits and letters, accurately determining form, composition and size.

This has the great advantage that after a first personal contact pieces can be made without any preliminary discussions, limiting possibilities owing to the distance U.S.A.–Europe.

The starting-point of all this should be that the person directing the production has a thorough insight into this matter.

Another important issue is the selection of the materials. The specific kind of material is virtually irrelevant for the outward appearance of the piece, this being determined by the surface treatment. This means that, without influencing the outward appearance, one should take full account of for instance weight, strength and construction-possibilities.

One may conclude from all this that contrary to statements by the artist, the production of his work is just a simple matter.

However, it is not. Next to these favorable aspects for fabrication there are other problems playing their role, like for instance which kind of construction has to be selected.

Everything which may damage the straight forms, like fastening materials, has to be avoided. It should always be tried to subordinate technics to forms. This sometimes requires highly unusual constructions, making serious demands to the ingenuity of those responsible for production.

These problems, however, make it attractive to the fabricator to de the work, being able to participate in this way to a fascinating experience, the works of art of Sol LeWitt.

Barbara M. Reise

LeWitt and colour

LeWitt's colours, like his lines and his squares, are like 'facts': they are inert, pre-established, accepted and un-emotional man-made constructs which can 'come to life' within a present context but do not necessarily do so. Red, yellow, blue, and black (and the white of wall or paper) are standard 'absolute primaries' basic to all pigment colour – that is, according to the colour system accepted by art academics from early 19th Century theorists like Chevreul. Unlike the Newtonian rainbow-spectrum based on light waves, this theoretical structure is more conceptually mathematical and tautological than referential to some exterior and inhuman Nature; and its art-historical pedigree goes back to the Gaeco-Roman concerns with colour as property of physical matter in stone and glaze and pigment. LeWitt's use of these colours is as flatly complete, physical, and self-reflective as the theory itself. Unlike Seurat, whose use of the same colour theories was subordinated and interrelated to other interests in proportion theories and (seen) scene subject-matter, LeWitt uses colour as both the subject and the object of his act.

He integrates each of the four 'colours' with one of the four 'absolute' directional lines used throughout his 'drawings' since 1968. Then he combines these lines in the simple additive combinations used in his black line-drawing booklet published by *Studio International* in 1969. The intervals of white paper or wall work equally serve as lines against their pigmented primaries, integrating the physical 'ground' and physical applications into a surface where this distinction would be irrelevant if there were no white border. The whiteness of the ground acts like light. It seems to exude through the lines, accentuating their character as material-objects woven into a spatial irridescence. There is more about sculpture than mixture in these combinations, and the results are virtually unnameable in traditional colour 'language'. This is particularly apparent in the combination of red-yellow-blue, which the academic pigment mixers would have us believe becomes grey. But it is also apparent in the yellow-blue and red-blue combinations which, while loosely presenting the 'secondary' colours of green and violet, shimmer in surprising spatial optics. And in the case of the pen and ink drawings now owned by Mia and Martin Visser, the transparency of the pigments and simplicity of the formats serve to accentuate these effects into sheer beauty.

But beauty is not the point of LeWitt's work or his use of colour. He has done some things with it which *look* ugly and arbitrary as well. His 'Five Silk Screen Prints' are a good example. Their system structure is as logically complete as and more compact that the Visser drawings. The simplest way of consistently presenting different numbers of colour-line combinations in equal areas is to make 'bands'. But these bands, in their refusal to interrelate in a visually delectable fusion, 'look' like ugly 'stripe painting' to minds imbued with *that*. If one were to look for some standard with which to compare LeWitt as an artist, the inventor of Esperanto would be more relevant than the author of *Ulysses*. For it is the grammar of colour rather than its heart-beat immediacy in grand or anti-heroic humanity which LeWitt has used to go out on a limb over the abyss of irrelevance.

Hans Strelow

Sol LeWitt's art as idea for systems of combinations of straight lines and right angles

'Art is Harmony. Harmony is an analogy of contrasts, an analogy of similarity ... .
The contrasts are: for the line, those which form a right angle'.
– Georges Seurat

The straight line and the right angle are the basic elements of Sol LeWitt's art.

The sidelines of four right angles form a square (rectangle).

Sculpture

1 Six two-dimentional squares (rectangles) from a three-dimensional cube (quadrangle)

a The closed cube (solid rectangle) consists of six planes, all forming right angles with each other.

b The open cube (solid rectangle) consists of twelve planar elements, all forming right angles with each other.

2 The combination of a closed cubes (solid rectangles)
b open cubes (solid rectangles)
ab open and closed cubes (quadrangles)
with all variations possible within this limitation forms the system of Sol LeWitt's sculpture.

Drawings

1 The short lines between each two of the four angles of a square (rectangle) are the sidelines, the long lines are the diagonals.

a/b Each two sidelines of a square (rectangle) have an infinite number of similar parallel lines on the plane of the square (rectangle).

a The vertical sidelines have vertical parallels.

b The horizontal sidelines have horizontal parallels.

c/d Each of both diagonal lines of the square (rectangle) have an infinite number of parallels, regularly foreshortening on the plane of the square (rectangle) into both opposite right angles.

2 ab The combination of vertical parallels and horizontal parallels forms tetrahedrons with their sides parallel to the sides of the square (rectangle).

ac/d The combination of vertical parallels and one of the two diagonal parallels forms rhombs resting on their points

bc/d The combination of horizontal parallels and one of the two diagonal parallels forms rhombs resting on their sides.

c/d The combination of both diagonal parallels forms tetrahedrons resting on their points.

abc/d The combination of vertical parallels, horizontal parallels and one of the two diagonal parallels forms triangles with their bases parallel to the diagonals.

acd The combination of vertical parallels and both diagonal parallels forms triangles with their bases parallel to the verticals.

bcd The combination of horizontal parallels and both diagonal parallels forms triangles with their bases parallel to the horizontals.

abcd The combination of horizontal, vertical and both diagonal parallels creates in each of the squares (rectangles) generating from this combination an image of the 'over-all form' of this system. This means that each small square (rectangle) is divided into two smaller squares (rectangles) by either a vertical or a horizontal parallel, each of which is intersected by alternating diagonals from left to right and from right to left.

The combination of squares (rectangles)

a/b Parallels to the sidelines
c/d Parallels to the diagonals
a/b/c/d Parallels to the sidelines and to the diagonals
with all variations possible within these limitations forms the system of Sol LeWitt's drawings.

'The idea becomes a machine that makes the art'
Sol LeWitt

'The work is a manifestation of an idea. It is an idea and not an object'
Sol LeWitt

Sol LeWitt's ideas are systems of combinations for the straight line and the right angle. Art as idea for systems of combinations.

Lawrence Weiner

Not in eulogy not in praise but in fact

(Some notes upon the sculpture itself of Sol LeWitt)

Perhaps inherent within the structure of the sculpture itself

Perhaps inherent within the structure of the intent itself

Perhaps within itself the activity and then again perhaps within the fact itself.

Amsterdam 1970

Untitled 1965 lacquered wood 6' x 4' x 18" Coll. Les Vallador, N.Y.

Untitled 1965 lacquered wood 4' x 4' x 2"

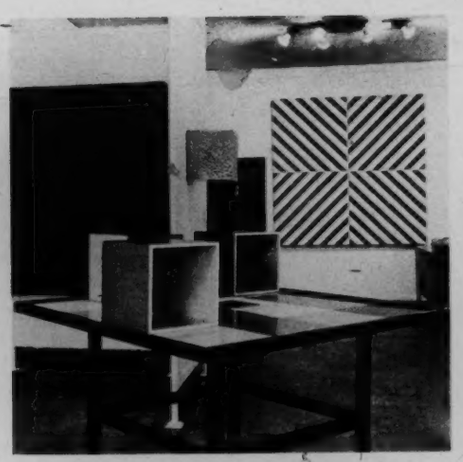
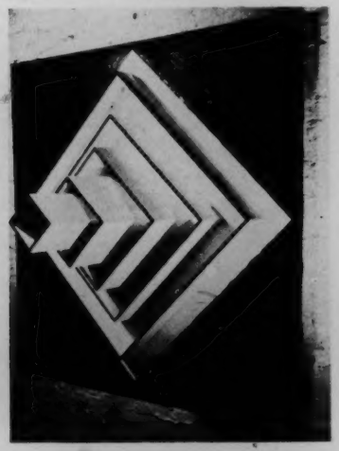
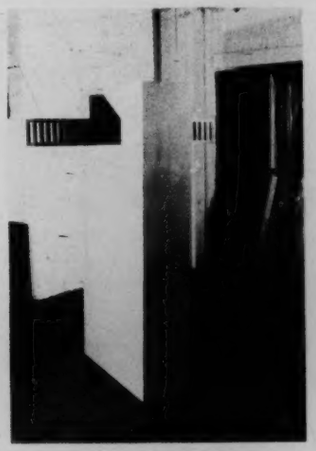


Table with grid and cubes, Box with holes containing something Installation Kaymar Gallery, N.Y. 1963

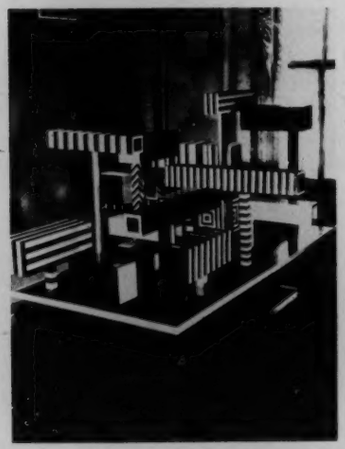


Serial Wall Piece 1963 painted wood 60" x 60" x 25"

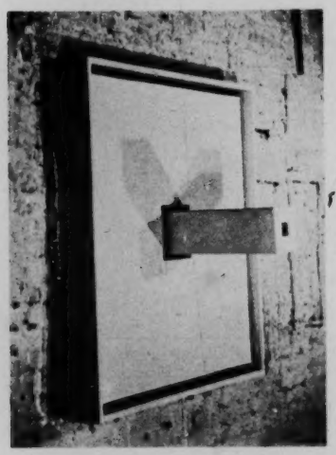


Untitled 1963 painted wood 72" x 48" x 30"

Well 1963 painted wood 55" x 28" x 28"



Untitled 1963 table/wood 72" x 30" x 20" (approx.) destroyed



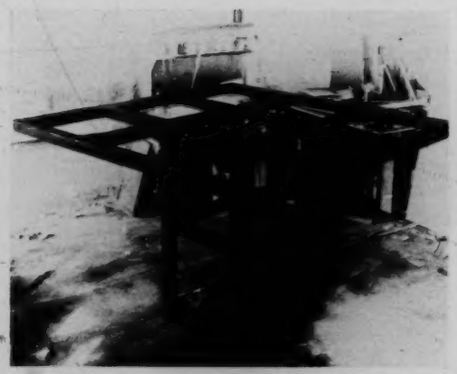
Untitled 1962 painted wood 30" x 30" x 24"

Untitled 1962 painted wood 30" x 20" x 20"

I Piece 1964 wood 40" x 18" x 2"

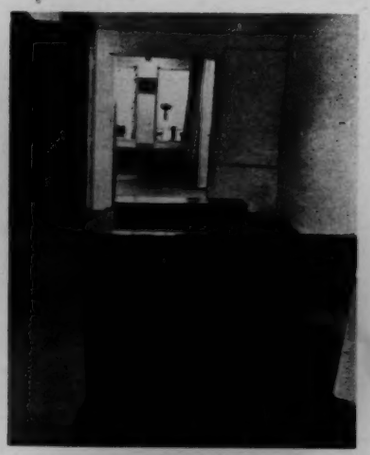
Untitled 1964 wood painted white 66" x 13" Coll. Luby

Wooden Piece 1964 Wood 33" x 20" x 4" (approx.)

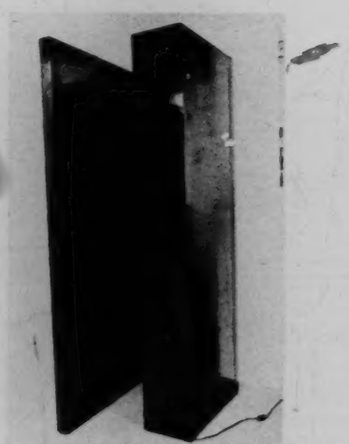


Wooden structure 1965 wood painted black 4' x 7' x 7'

Untitled 1965 wood painted black 8' x 27" x 27"

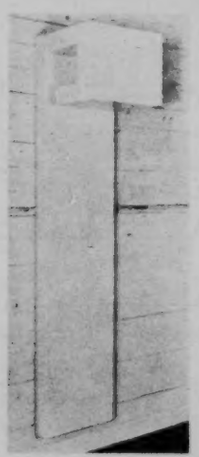


Installation Daniels Gallery, N.Y. 1965

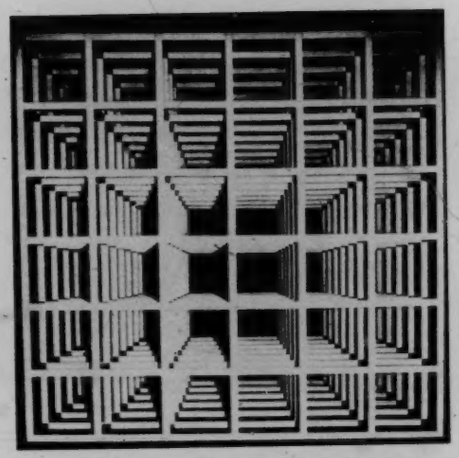


Untitled 1964 lacquered wood 96" x 32½" x 41¾"
Coll. Virginia Dwan, N.Y.

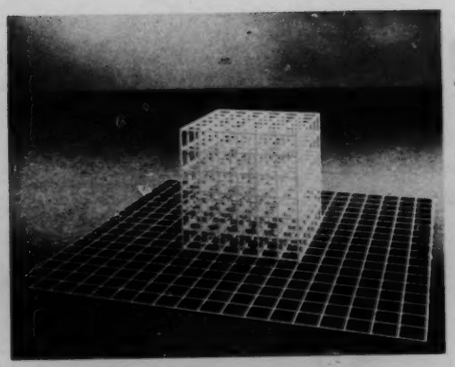
Standing Structure 1964 lacquered wood 8' x 8' x 4'
Coll. W. Insley, N.Y.



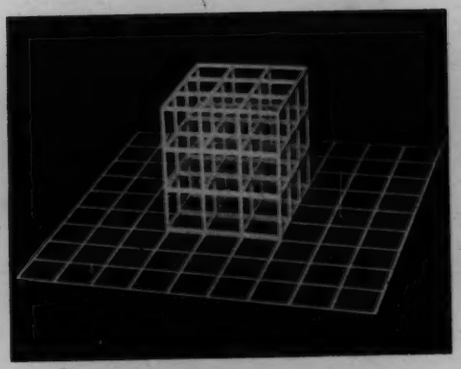
Untitled 1965 lacquered wood 6' x 16" x 14" Coll.
Robert Smithson, N.Y.



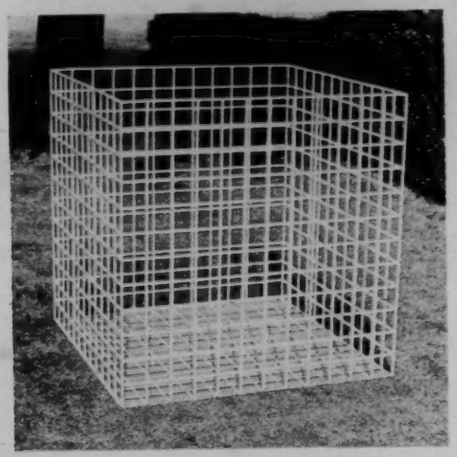
Modular Open Cube 1966 aluminium/white bakec enamel 60" x 60" x 60" Coll. Art Gallery of Ontario, Toronto



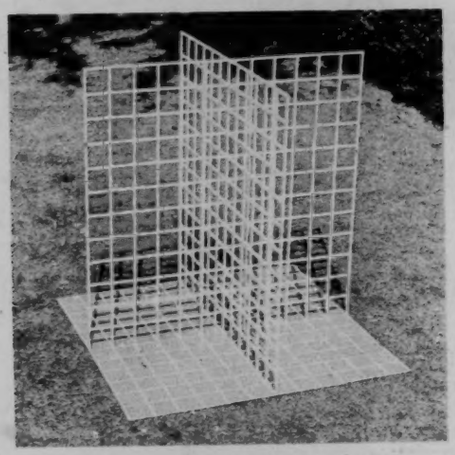
Untitled Cube 1965 white painted metal 15¼" x 15¼" x 15¼" grid: 45¾" x 45¾" Coll. Howard Lipman, N.Y., Wm. Rubin, N.Y.



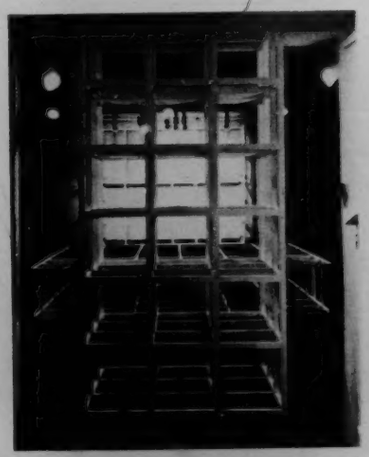
Cubic Cube 1968 steel/white baked enamel 12" x 35½" x 35½" Coll. Herman and Henriette van Eelen, Amsterdam



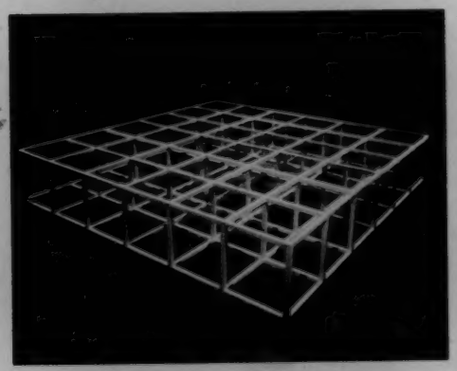
Untitled 1968 aluminium/white baked enamel 89½ x 89½ x 89½ cm.



Untitled 1968 aluminium/white baked enamel 89½ x 89½ x 89½ cm.

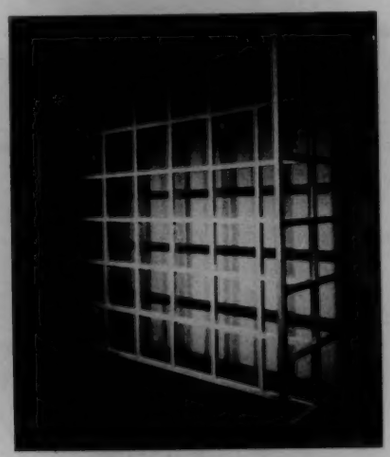


Untitled 1966 steel/white painted enamel Installation Dwan Gallery, N.Y.

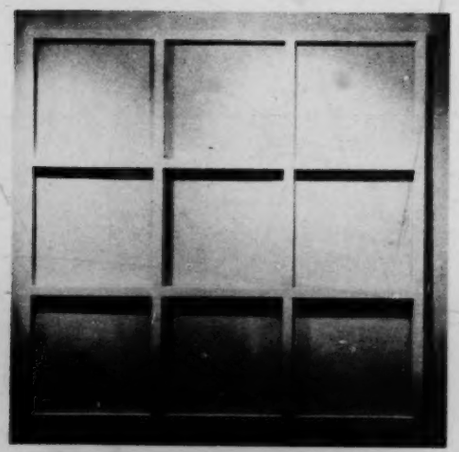


Modular structure 1966 steel/white baked enamel 25¼" x 141½" x 141½"

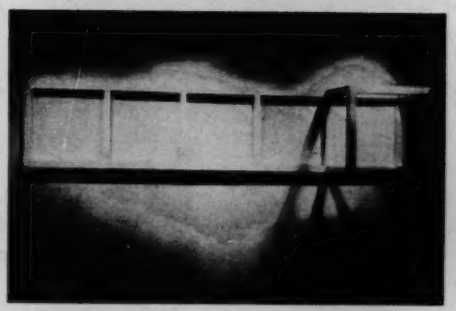
Modular Piece 1965/66 steel/white baked enamel 9' x 55" x 55" Dwan Gallery, N.Y.



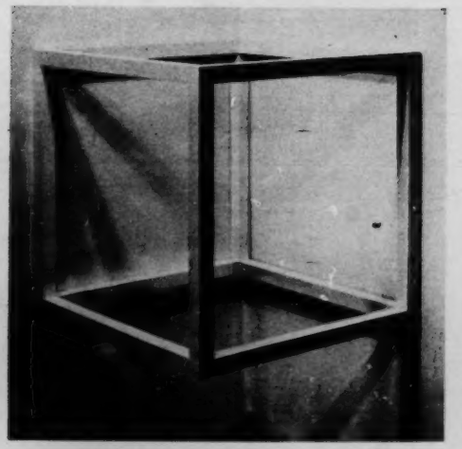
Standing Piece 1966 steel/white baked enamel 9' x 9' x 30" Dwan Gallery, N.Y.



Hanging Modular Structure 1966 steel/white baked enamel 71" x 71"

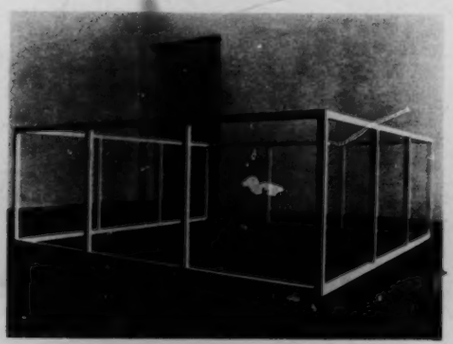


Modular Wall Piece 1965 steel/white baked enamel 18" x 18" x 7'



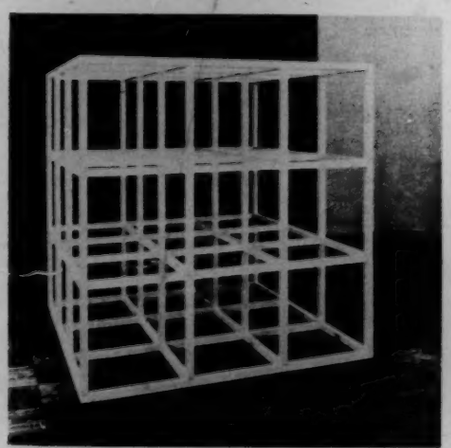
Open Cube/Corner Piece 1965 steel/white baked enamel 48" x 48" x 48" Coll. W. Hahn, Cologne

Standing Modular Structure 1966 wood painted white 98½" x 98½" x 26" Dwan Gallery, N.Y.

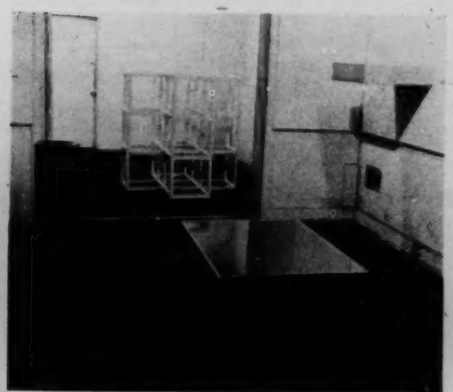


Untitled 1967 steel/white baked enamel 2' x 6' x 6' Installation Galerie Bischofberger, Zurich

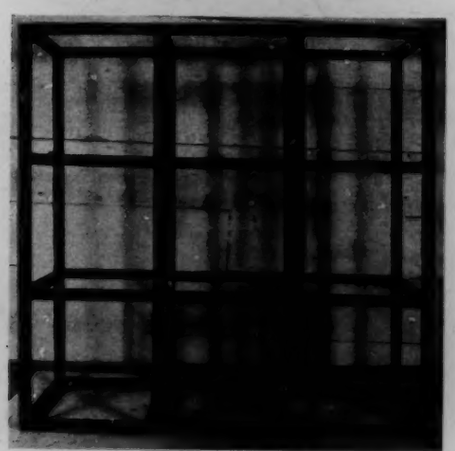
Untitled 1968 wood painted white each square 48" x 48" Coll. Dr. Paul Wember, Krefeld



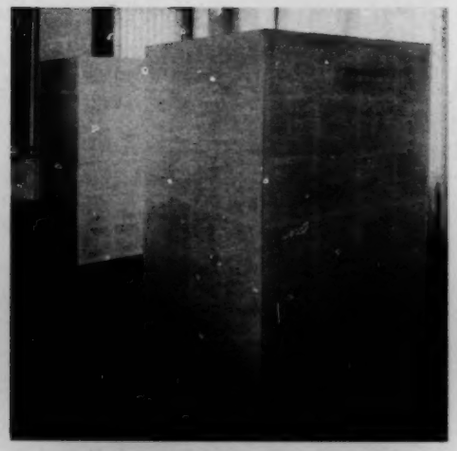
Modular open cubes 1966 steel/white baked enamel 6' x 6' x 6' Installation Jewish Museum, N.Y., Primary Structure exh.



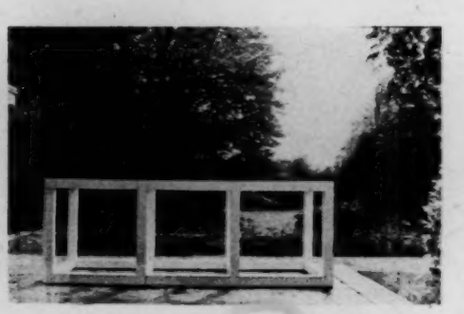
Untitled 1966 steel/white baked enamel 55" x 55" x 55" Installation Sachs Gallery, N.Y., group show



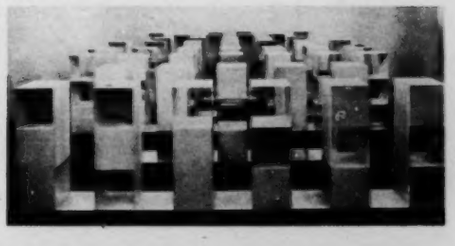
Modular Piece 1965 wood 6' x 2' x 2' Coll. Robert Smithson, N.Y.



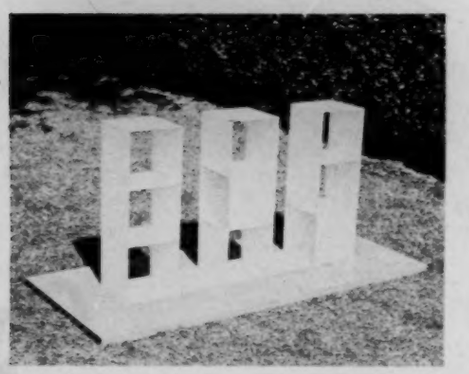
Structure with pencil drawings on the side 1969
6' x 4' x 4' Installation Dwan Gallery, N.Y.



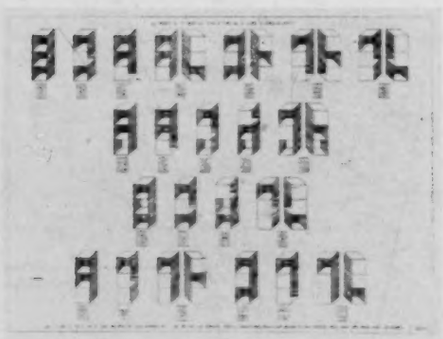
Untitled 1969 steel/white baked enamel
160 x 160 x 450 cm Coll. G. Agrati, Milan



47 3-Part variations on 3 different kind of cubes 1967
aluminium/white baked enamel Installation Dwan Gallery, N.Y.

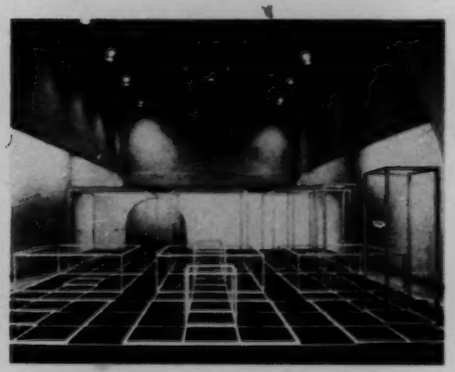


222 Three variations using open cubes only 1967-69
Konrad Fischer, Dusseldorf

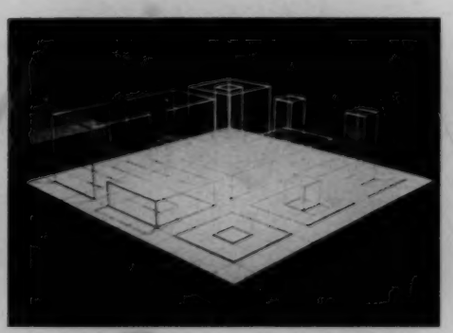


22 Pieces in 5 sets in which the No. 3 cube is predominant 1969 ink/paper Dwan Gallery, N.Y.

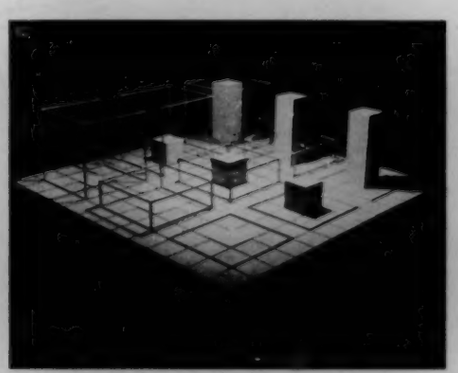
3-Part variations using each kind of cube once 1968
ink/paper Dwan Gallery, N.Y.



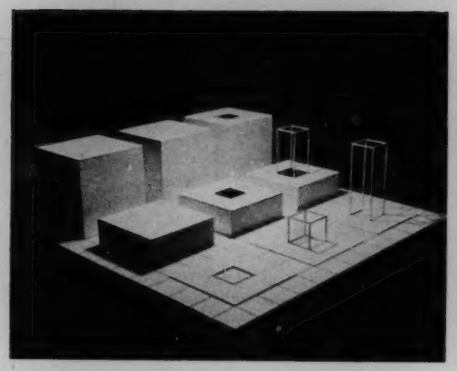
Series 'A' painted metal 7' x 24' x 24' Installation
Dwan Gallery, L.A.



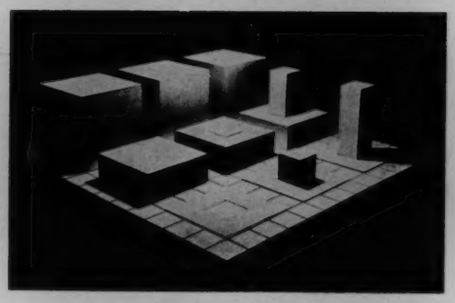
Set 'A' 1966 steel/white baked enamel 17" x 5' x 5'
Coll. Geertjan Visser, Antwerp



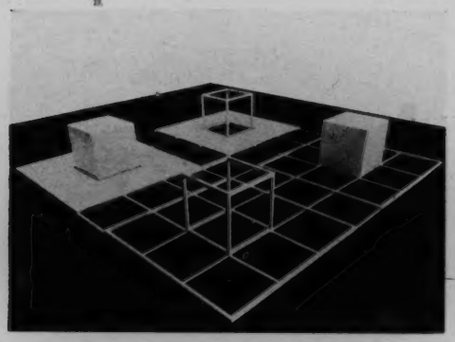
Set 'B' 1966 steel/white baked enamel 17" x 5' x 5'
Coll. J. Vaughn, London



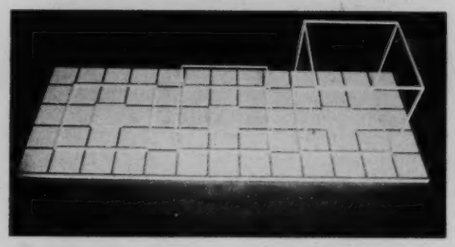
Set 'C' 1967 steel/white baked enamel 17" x 5' x 5' Coll. Mr. and Mrs. M. Visser, Bergeijk



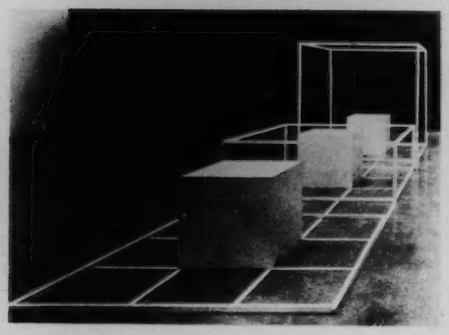
Set 'D' 1967 steel/white baked enamel 17" x 5' x 5'



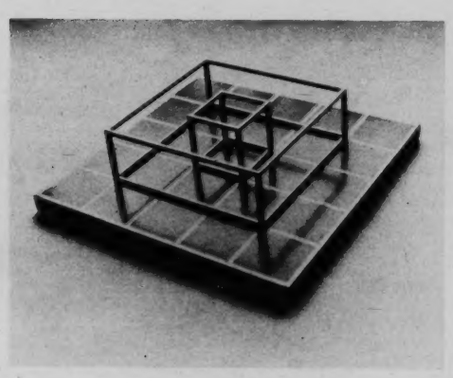
Set 'A$_2$B$_2$C$_2$D$_2$' 1967 aluminium/white baked enamel 71 x 483 x 483 cm Dwan Gallery, N.Y.



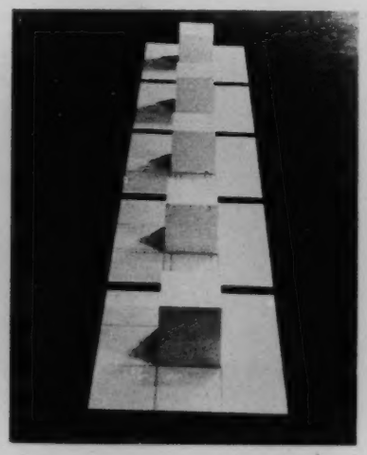
'B 147' 1968 steel/white baked enamel 17" x 6' x 2' Dwan Gallery, N.Y.



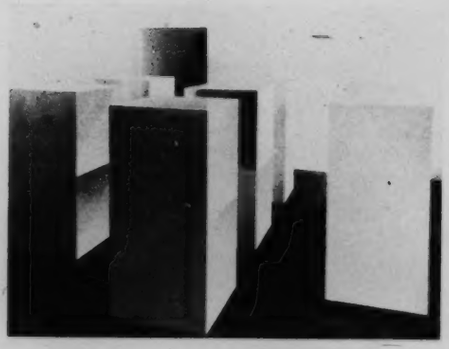
'B 258' 1967 aluminium/white baked enamel 81" x 81" x 24' 11" Coll. Museum of modern Art, N.Y.



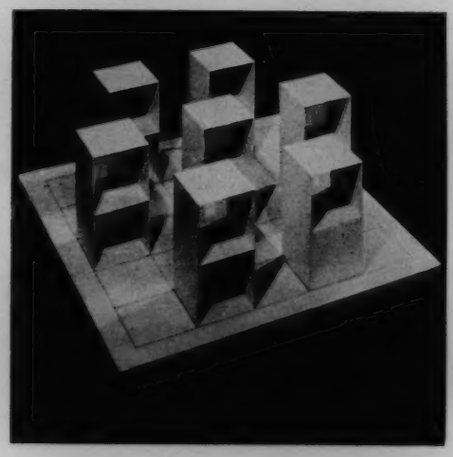
Untitled 1968 aluminium/white baked enamel 7 x 32 x 32 cm Coll. Jan Dibbets, Amsterdam



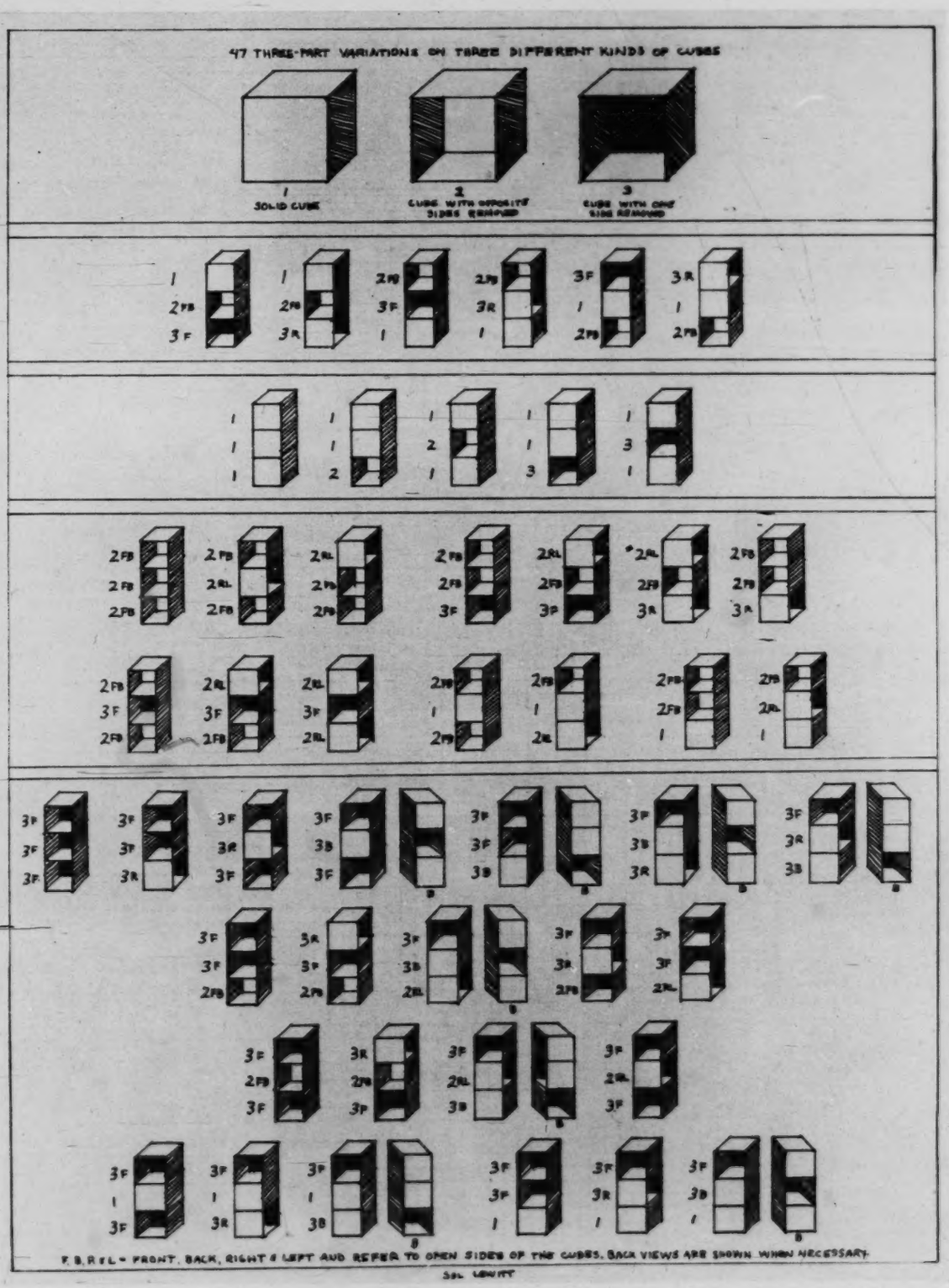
5 5-Part variations with hidden cubes 1968 aluminium/white baked enamel 5" x 14" x 66" Dwan Gallery, N.Y.



7 2-Part variations on 2 different kind of cubes 1968 aluminium/white baked enamel h. 140 cm Installation Galerie Bischofberger, Zürich

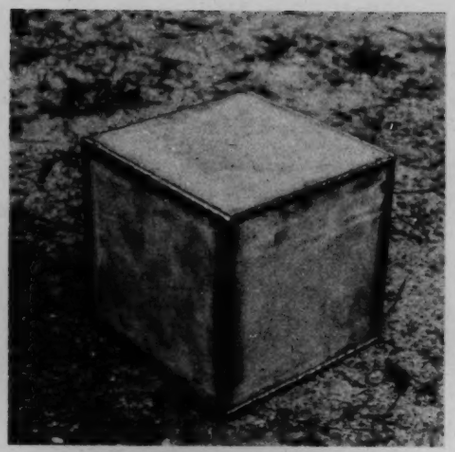


7 2-Part variations on 2 different kind of Cubes (2-3) 1967 white painted steel 9" x 23" x 23" Dwan Gallery, N.Y.


47 THREE-PART VARIATIONS ON THREE DIFFERENT KINDS OF CUBES
1
SOLID CUBE
2
CUBE WITH OPPOSITE SIDES REMOVED
3
CUBE WITH ONE SIDE REMOVED
F, B, R & L = FRONT, BACK, RIGHT & LEFT AND REFER TO OPEN SIDES OF THE CUBES. BACK VIEWS ARE SHOWN WHEN NECESSARY.
SOL LEWITT

Drawing for 47 3-Part variations on 3 different kind of cubes 1967 14" x 17" Coll. Don Judd, N.Y.

The Buried Cube, 1968



The cube containing an object of importance but little value

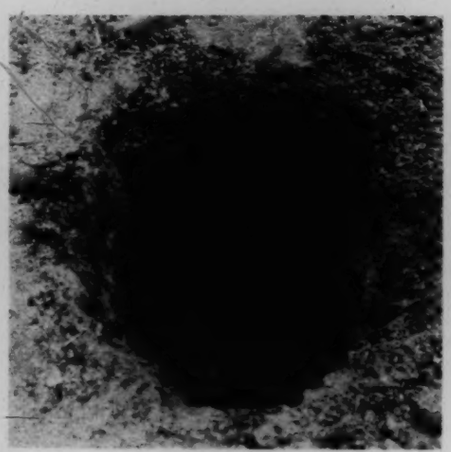
The Visser Family and the cube

Dick v. d. Net, maker of the cube

The artist and the cube

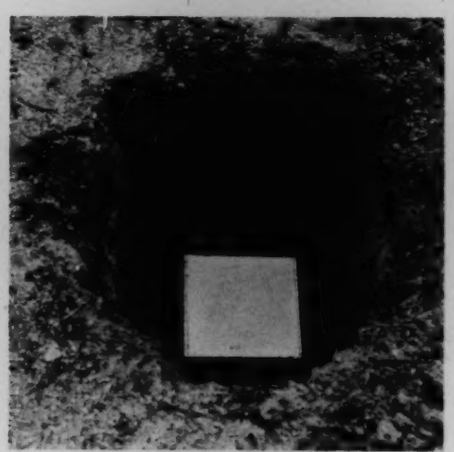
The shovel

The artist digging

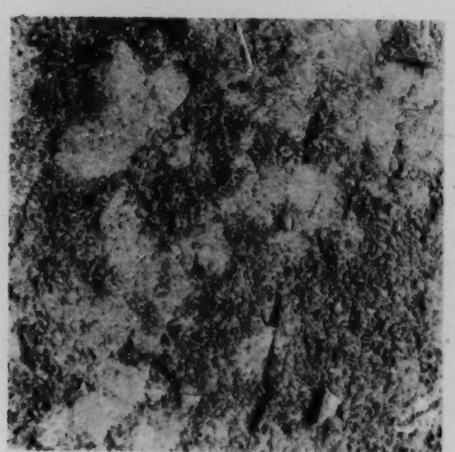


The hole

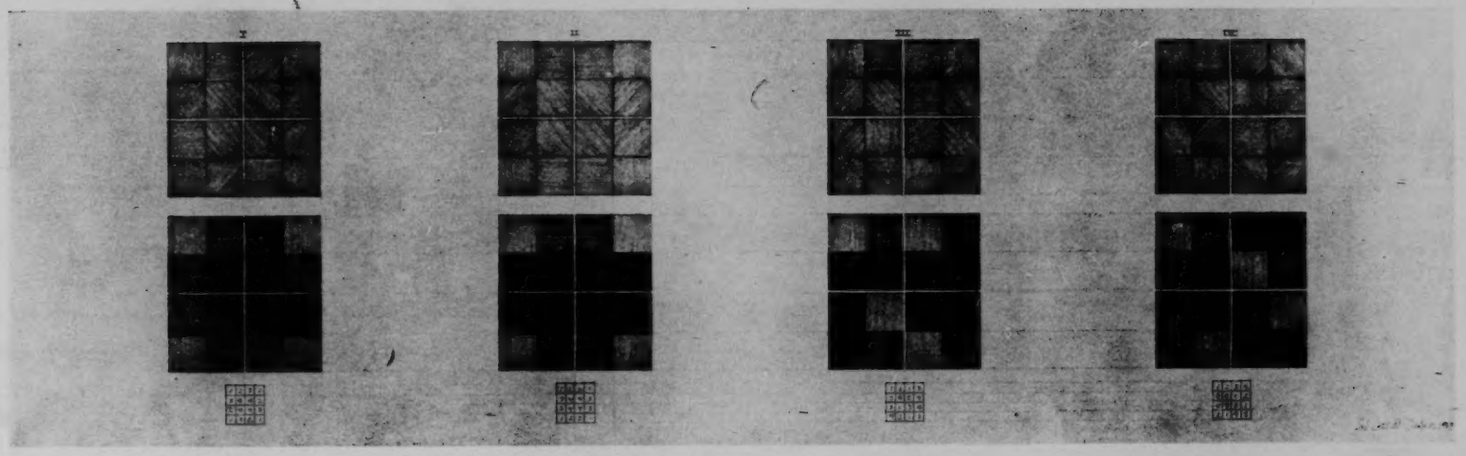
Coll. Mr. & Mrs. M. Visser, Bergeijk



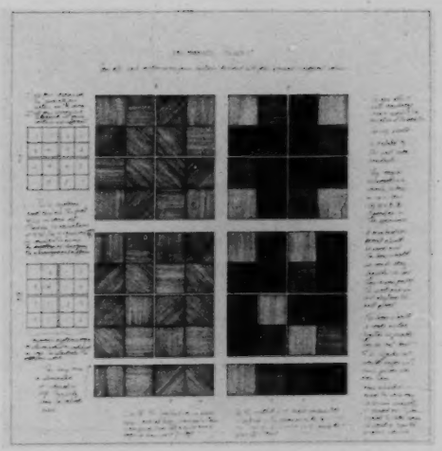
The cube in the hole



The hole filled in

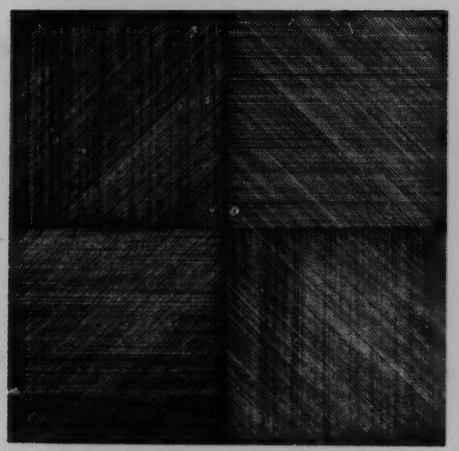


Composite Drawing 1969 ink/paper 18" x 4" Private coll.

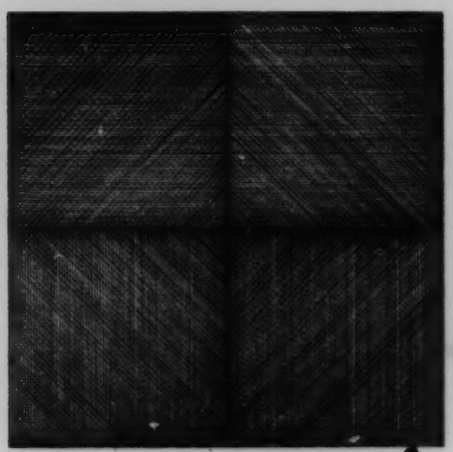


Wall Markings 1968 keys for A1 & 2. B1 & 2 ink/paper coll. Harald Szeeman, Bern

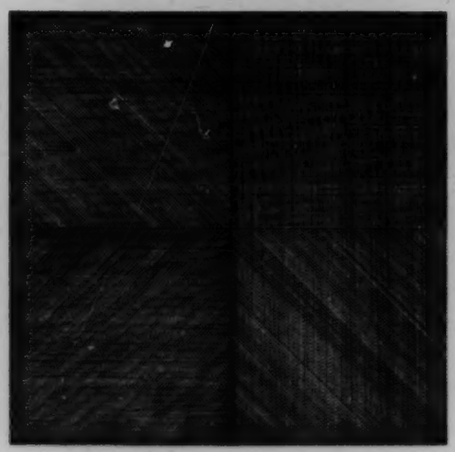
Lines and combination of lines Oct. 22 1969 ink/paper 25½ x 61 cm Coll. Jan Dibbets, Amsterdam



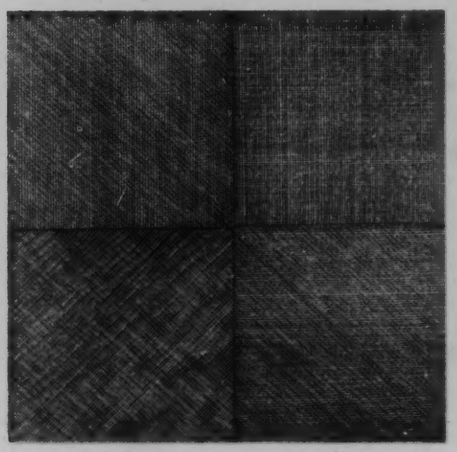
Drawing 6.3.69 ink/paper 30½ x 30½ cm Konrad Fischer, Düsseldorf



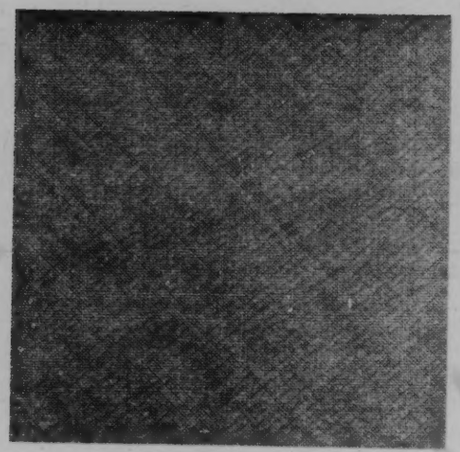
Drawing 6.4.69 ink/paper 30½ x 30½ cm Konrad Fischer, Dusseldorf



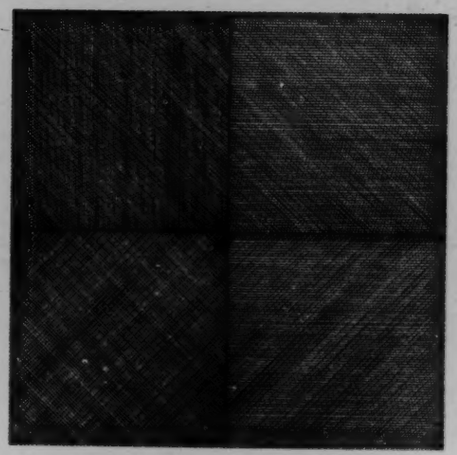
Drawing 6.5.69 ink/paper 30½ x 30½ cm Konrad Fischer, Dusseldorf



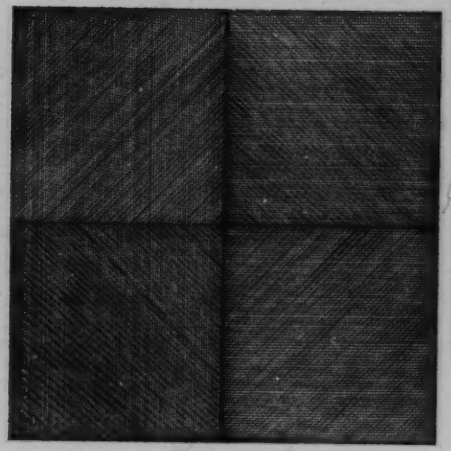
Drawing 6.6.69 ink/paper 30½ x 30½ cm Konrad Fischer, Dusseldorf



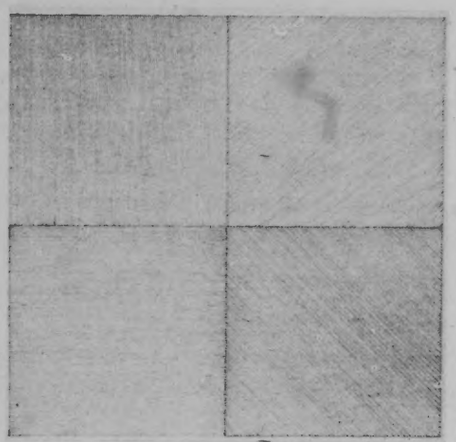
'1 2 3 4' 1969 ink/paper 7" x 7" Dwan Gallery, N.Y.



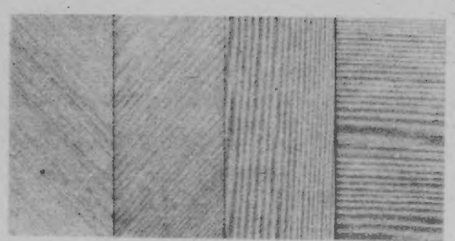
Drawing 1969 ink/paper 7" x 7" Dwan Gallery, N.Y.



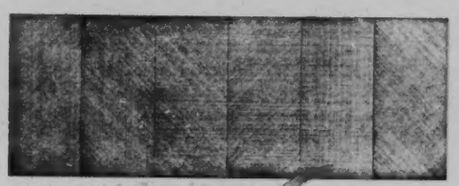
Drawing 1969 ink/paper 10" x 10" Dwan Gallery, N.Y.



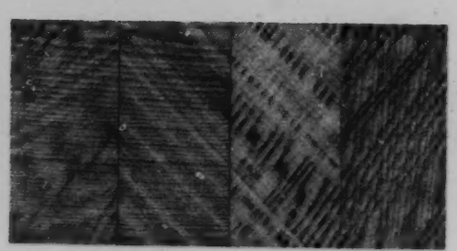
'1 2 3 4' 1969 ink/paper 10" x 10" Dwan Gallery, N.Y.



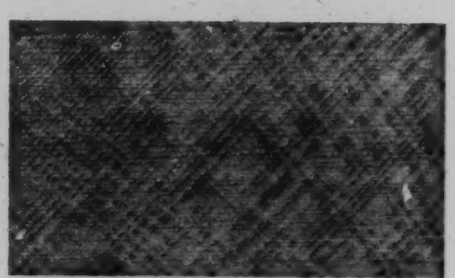
Drawing June 17 1969 ink/paper 10" x 1' 9" Dwan Gallery, N.Y.



Drawing June 24 1969 ink/paper 8" x 1' 9" Dwan Gallery, N.Y.

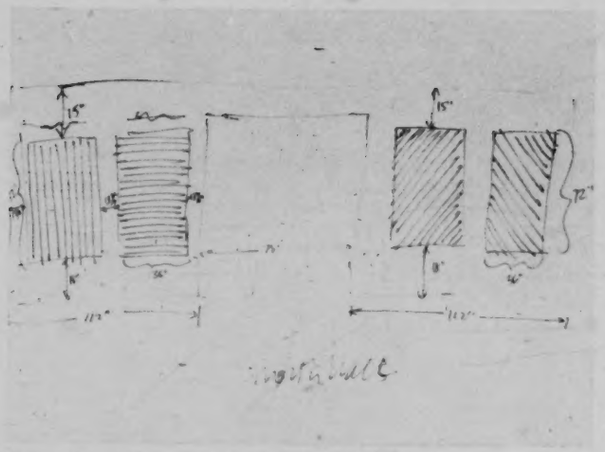


Drawing June 18 1969 ink/paper 10" x 1' 9" Dwan Gallery, N.Y.

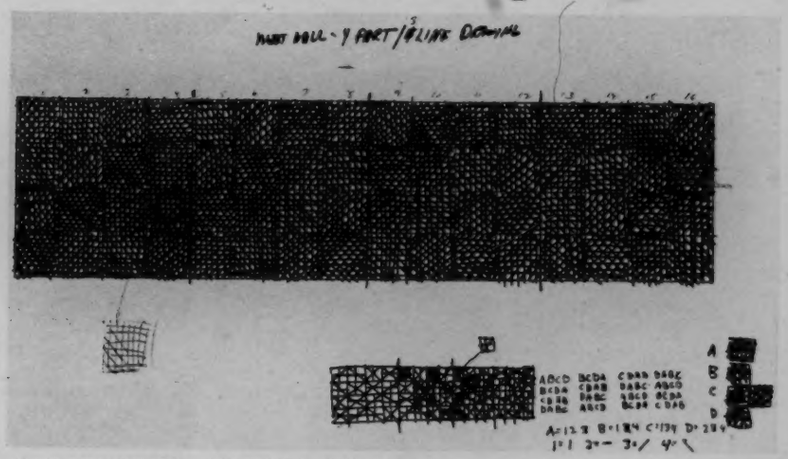


2 3 4' 1969 ink/paper Dwan Gallery, N.Y.

Plan for Wall Drawing Paula Cooper Gallery, N.Y., May 15, 16 1969 Coll. Museum of Modern Art, N.Y.

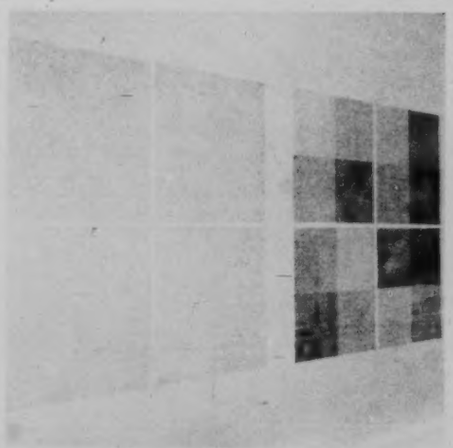


Working drawing for North Wall of Dwan Gallery Show Oct. 1969 Private coll. London

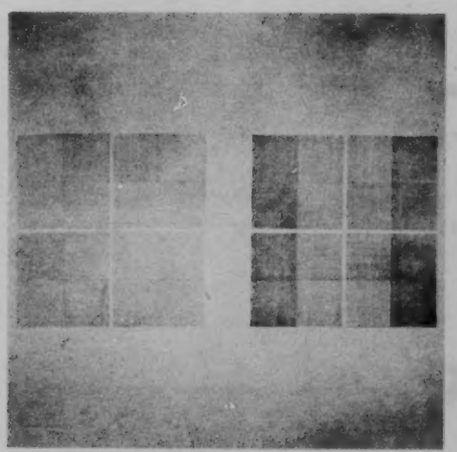


Working drawing for East Wall of Dwan Gallery show Oct. 1969 Private coll. London

Color Wall Drawing 1969 pencil 6' x 6' Dwan Gallery, N.Y.

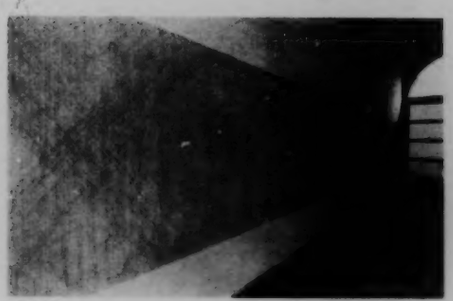


Drawing Series IV/1 2 3 4 A & B 1969 Installation Dwan Gallery, N.Y. deleted



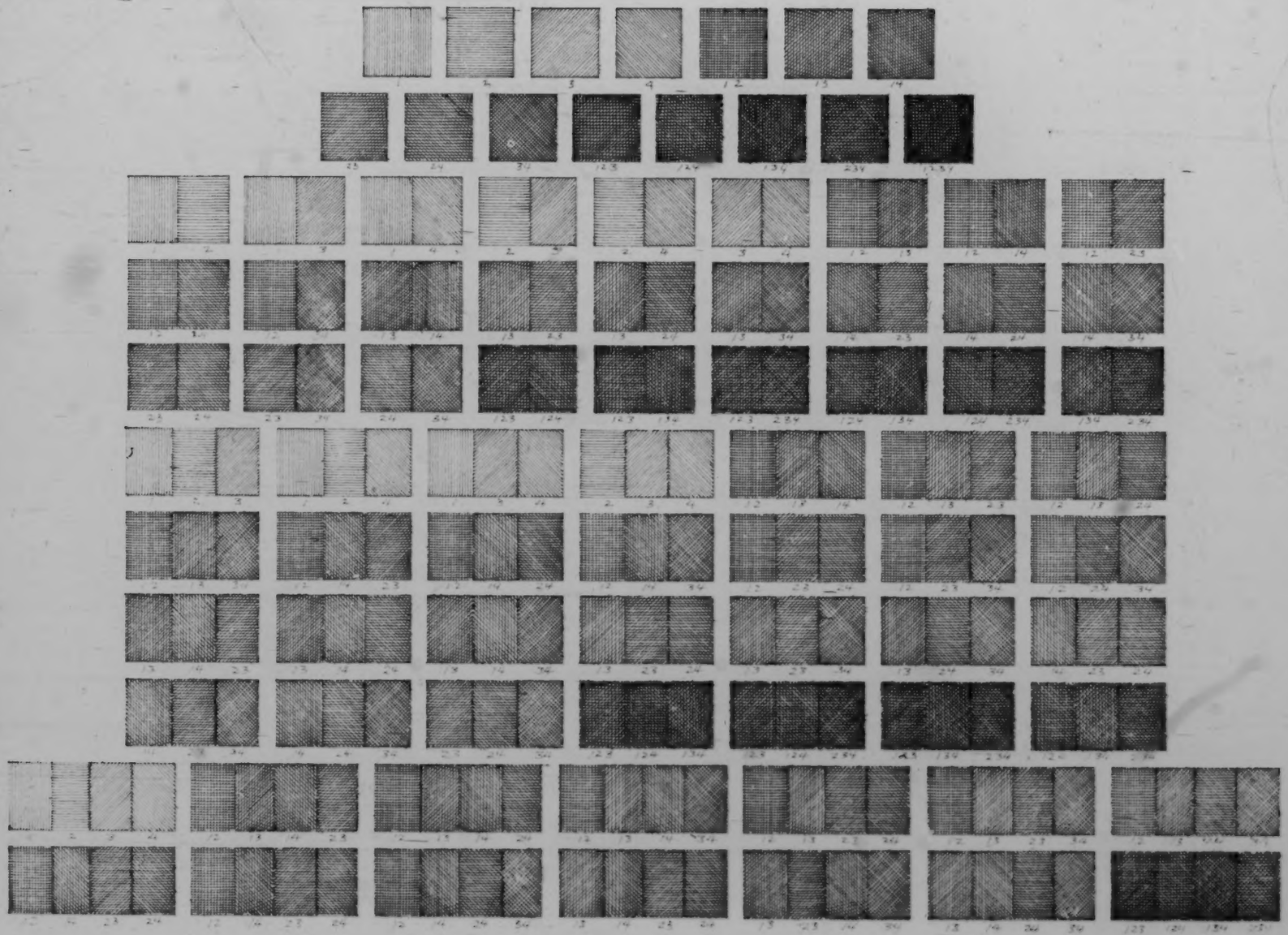
Drawing series ~~3~~ 1 4 2/II Oct. 1968 Benefit exh. for Student Mobilization Committee to end the War in Vietnam Paula Cooper Gallery, N.Y. deleted

Wall drawings January 1969 Installation Ace Gallery, L.A. deleted



Wall drawing April 1969 Installation Konrad Fischer, Düsseldorf deleted

Wall drawing May 1969 Installation Galleria L'Attico Rome deleted



Art & Project drawing 1969 ink paper 29½ x 42 cm

ART EXHIBITION CATALOGUES REPUBLISHED ON MICROFICHE

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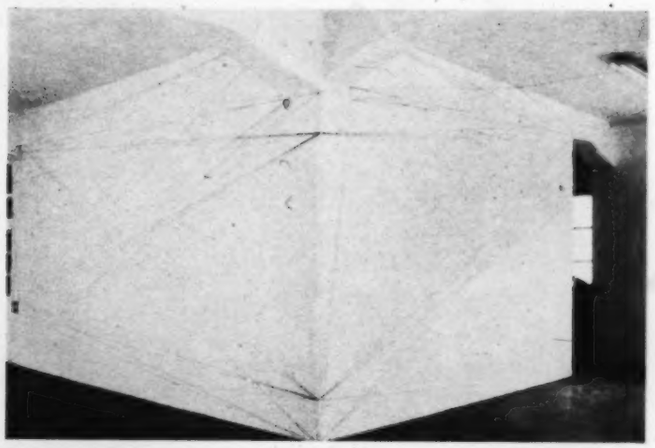
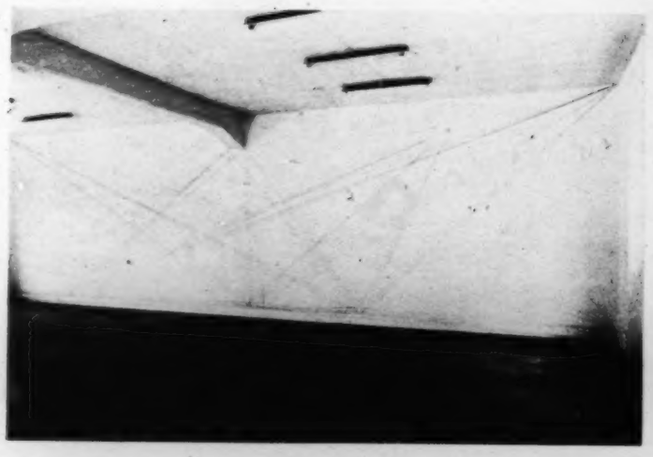
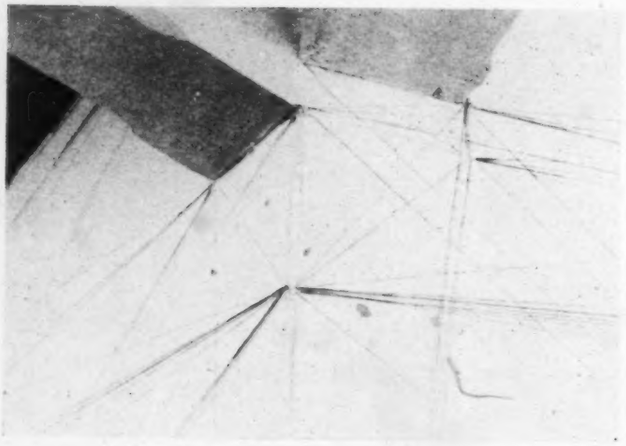
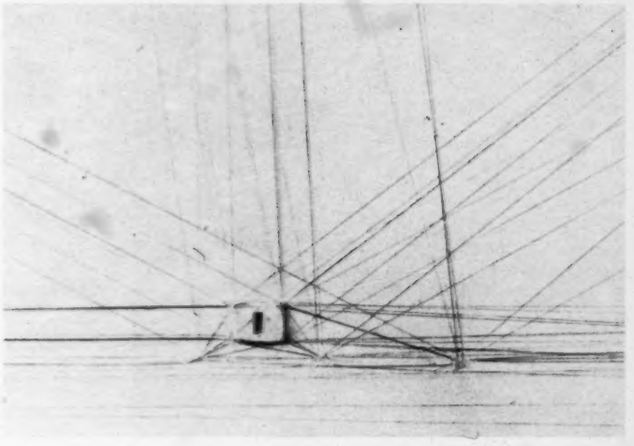
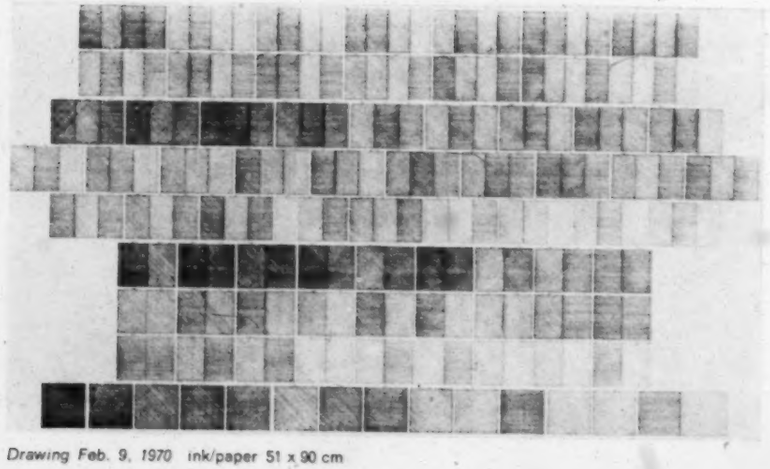




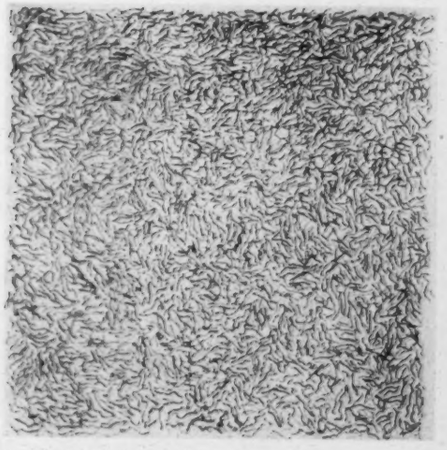




Lines drawn between architectural points, Galeria Sperone, Turin, 1970



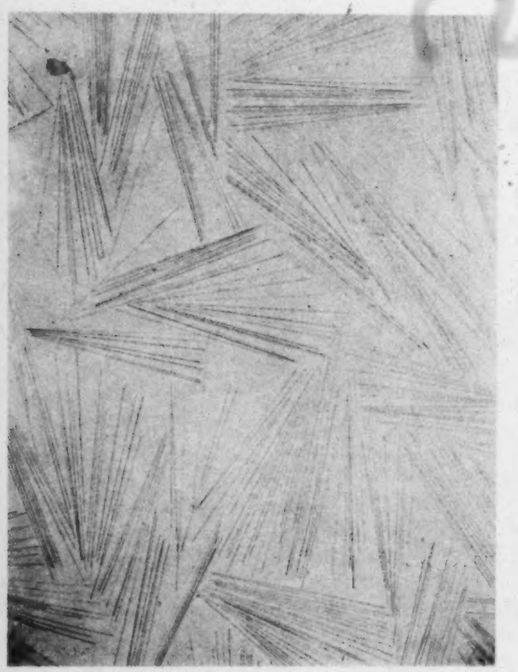
Drawing Feb. 9, 1970 ink/paper 51 x 90 cm



Untitled May 28, 1970 Pen/ink (red, blue, yellow) 36½ x 36½ cm, Konrad Fischer, Düsseldorf

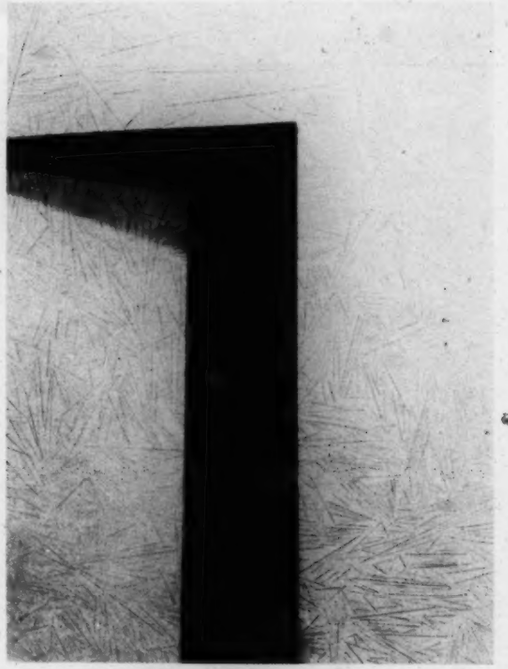
These are lines on the wall. A line only stands for itself. It doesn't describe anything but a line. The wall drawings were done to the artist's specifications. As long as these plans were followed, the artist is satisfied with the wall drawings. What they look like is not important to the artist. If there are errors in execution, they have been left and not erased, they are part of the work also. Each viewer may react as he may, liking or disliking the result, but it is important that he also know the plan from which they were drawn. The wall drawings were realized by Mr. Calatchi, Pacquement, Doychescu, Cadere, Lambert, LeWitt and Miss Kemény.

Straight lines of 24 cm not touching (detail)



Straight lines less than 24 cm not touching (detail)

Straight lines less than 24 cm not touching (detail)



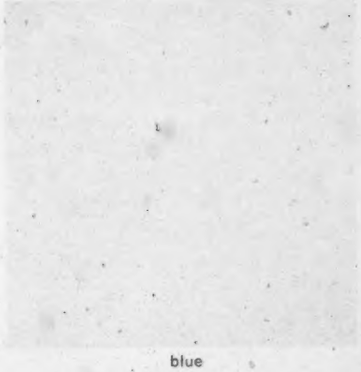
Installation Galerie Yvon Lambert, Paris, Juné 1970

Lines, colors and their combinations Dec. 1969/Jan. 1970

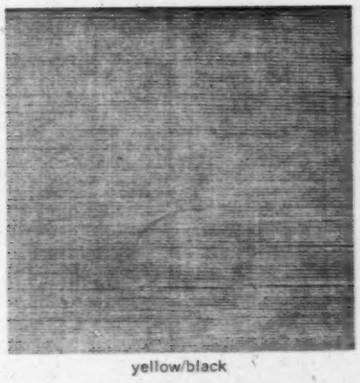
yellow

black

red



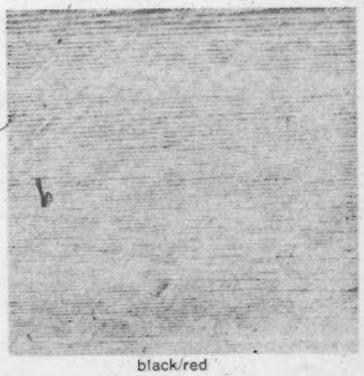
blue



yellow/black

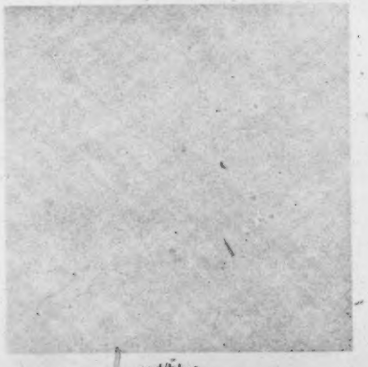
yellow/red

yellow/blue

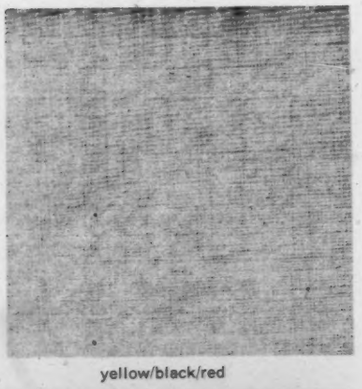


black/red

black/blue

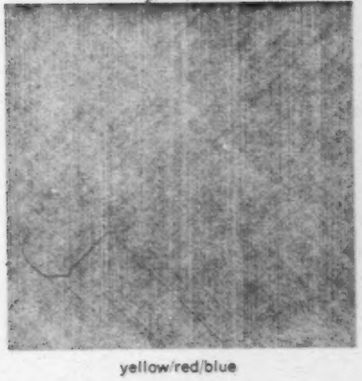


red/blue



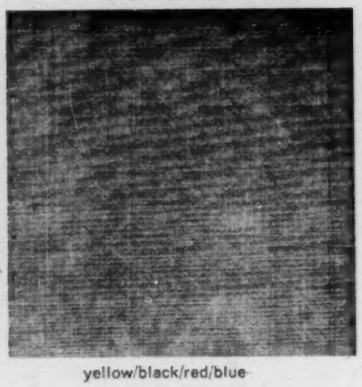
yellow/black/red

yellow/black/blue



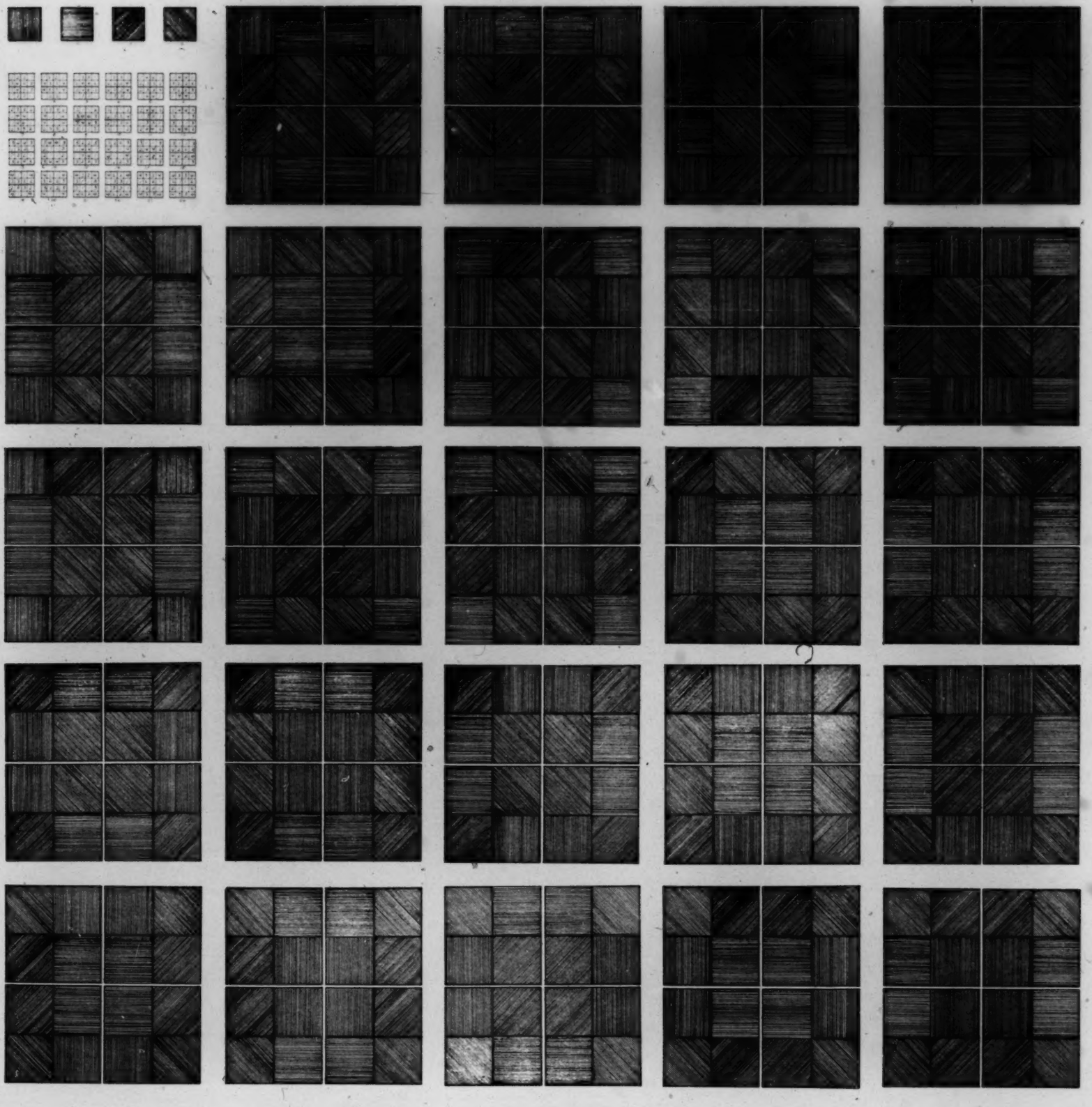
yellow/red/blue

black/red/blue

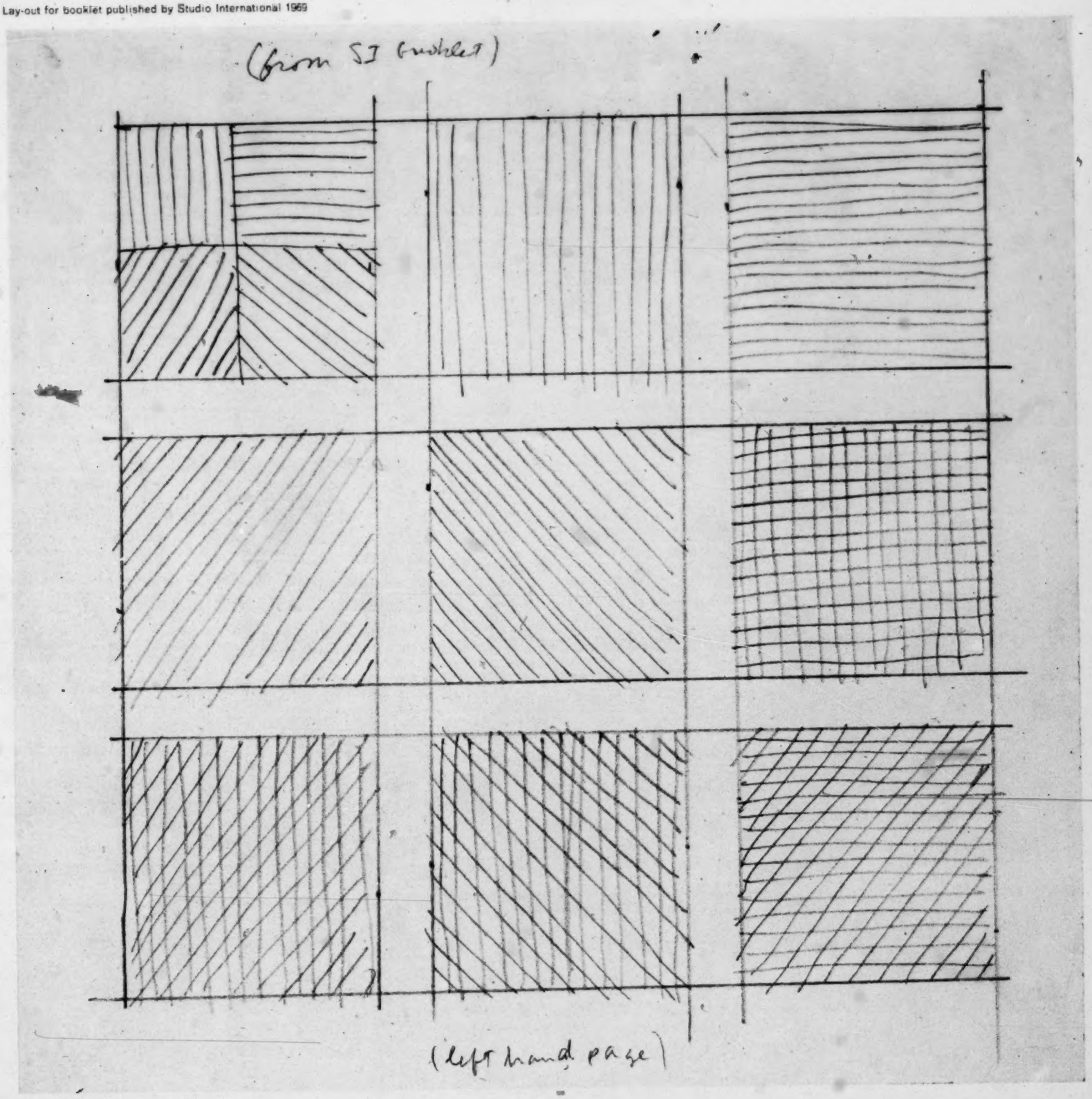


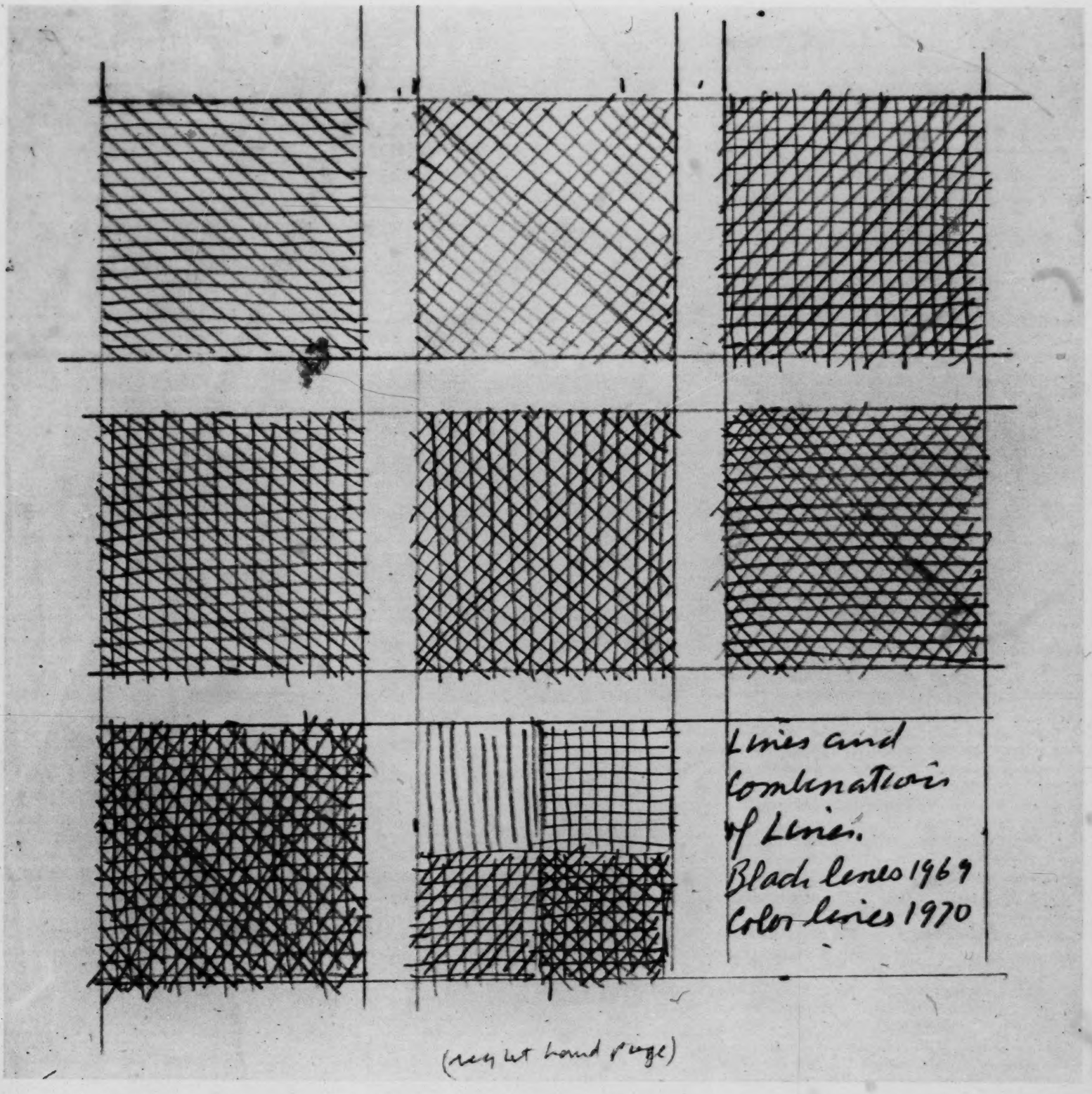
yellow/black/red/blue

Coll. Mr. & Mrs. M. Visser, Bergeijk



Lay-out for booklet published by Studio International 1969





(see cut hand page)

Serial Project
No. 1, 1966

Serial compositions are multipart pieces with regulated changes. The differences between the parts are the subjects of the composition. If some parts remain constant it is to punctuate the changes. The entire work should contain subdivisions which could be autonomous but which comprise the whole. The autonomous arts are units, rows, sets or any logical division that would be read as a complete thought. The series would be read by the viewer in a linear or narrative manner (1 2 3 4 5; A B B C C C; 1 2 3, 3 1 2, 2 3 1, 1 3 2, 2 1 3, 3 2 1) even though in its final form many of these sets would be operating simultaneously, making comprehension difficult. The aim of the artist would not be to instruct the viewer but to give him information. Whether the viewer understands this information is incidental to the artist; he cannot foresee the understanding of all his viewers. He would follow his predetermined premise to its conclusion avoiding subjectivity. Chance, taste, or unconsciously remembered forms would play no part in the outcome. The serial artist does not attempt to produce a beautiful or mysterious object but functions merely as a clerk cataloging the result of his premise.

The premise governing this series is: to place one form within another and include all major variations in two and three dimensions. This is to be done in the most succint manner, using the fewest measurements. It would be a finite series using the square and cube as its syntax. A more complex form would be too interesting in itself and obstruct the meaning of the whole. There is no need to invent new forms. The square and cube are efficient and symmetrical. In order to free a square within a larger square, the larger square is divided into nine equal parts. The center square would be equally distant from the outer square and exactly centered. A single measurement is used as the basis for the series. There is a large version and a small version. In the larger, the basic measure is 28″ (A 28″ tube can be made in one piece to fit through the smallest door – 30″). The outer measure was formed by multiplying 28″ by 3 and subtracting the width of the material (1½″ – the pieces were constructed of 1½″ square aluminium tubing) $28'' \times 3 = 84 - (1\frac{1}{2} + 1\frac{1}{2}) = 81''$. The two measurements for the large set are 28″ and 81″. All of the pieces in the series contain these measurements. The flat pieces are 1½″ high because that is the height of the metal. The two measurements used in the smaller set are 13⅜″ and 4⅜″.

The set contains nine pieces. They are all of the variations within the scope of the first permise. The first variation is a square within a square. The other variations follow: a cube within a square, a square within a cube, an outer form raised to the height of the inner cube, the inner cube raised to the height of the outer, larger cube, a cube within a cube and all cross-matching of these forms. The first set contains nine pieces. These pieces are laid out on a grid. The grid equalizes the spacing and makes all of the pieces and spaces between of equal importance. The individual pieces are arranged in three rows of three forms each. In each row there are three different parts and three parts that are the same. The inner forms of one row of three are read in sequences as are the outer forms. The possible permutations of these rows are: 1 2 3, 4 5 6, 7 8 9, 1 4 7, 2 5 8, 3 6 9, 1 5 9, 3 5 7.

The measurements for the large set are:

1 Inside 28″ x 28″
Outside 81″ x 81″

2 Inside 28″ x 28″ x 28″
Outside 81″ x 81″

3 Inside 28″ x 28″ x 81″
Outside 81″ x 81″

4 Inside 28″ x 28″
Outside 81″ x 81″ x 28″

5 Inside 28″ x 28″ x 28″
Outside 81″ x 81″ x 28″

6 Inside 28″ x 28″ x 81″
Outside 81″ x 81″ x 28″

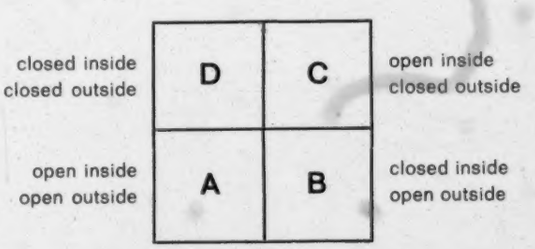
7 Inside 28″ x 28″
Outside 81″ x 81″ x 81″

8 Inside 28″ x 28″ x 28″
Outside 81″ x 81″ x 81″

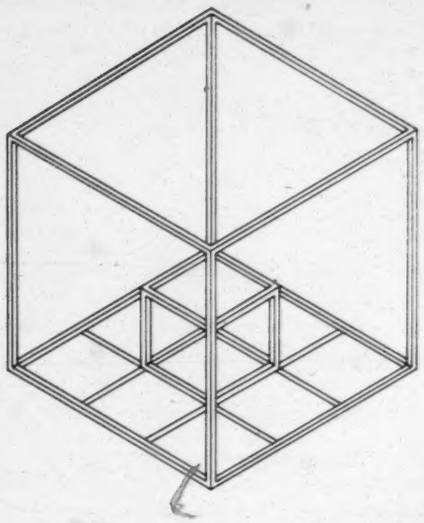
9 Inside 28″ x 28″ x 81″
Outside 81″ x 81″ x 81″

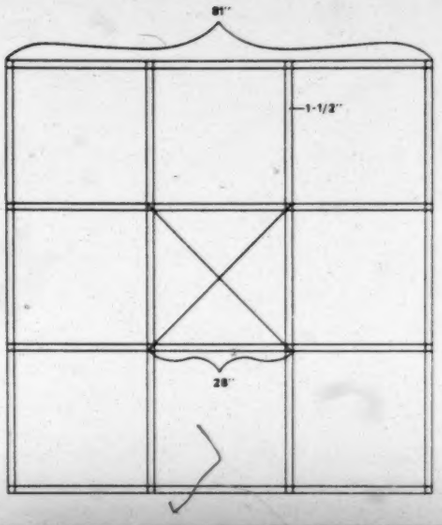
For the small set substitute 13⅜″ for 81″ and 4⅝″ for 28″.

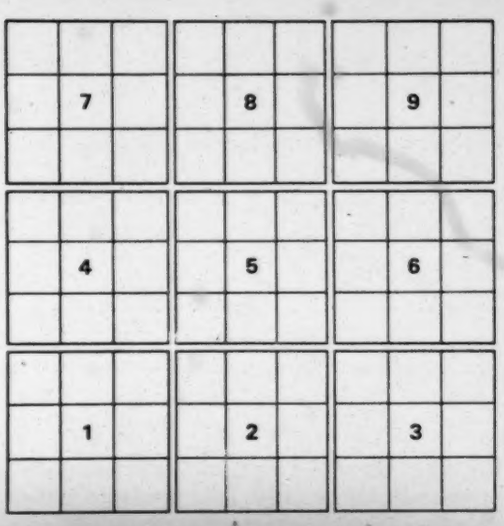
The sets of nine are placed in four groups. Each group comprises variations on open or closed forms.



In cases in which the same plane is occupied by both the inside and outside forms, the inside plane takes precedence. This is done so that there is more information given the viewer. If it were the obverse more forms would be invisible, impeding the viewer's understanding of the whole set. When the larger form is closed and the top of the smaller form is not on the same plane as the larger – but lower – the smaller form is placed inside. If the viewer cannot see the interior form he may believe it is there or not but he knows which he believes is there or not there. The evidence given him by the other pieces in the set, and by reference to other sets will inform him as to what should be there. The sets are grouped in the most symmetrical way possible. Each set mirrors the others, with the higher pieces concentrated in the center. The grouping of sets allows additional sets to become obvious such as: A9, B9, C9, D9, or A258B258.







D

1	2	3
4	5	6
7	8	9

C

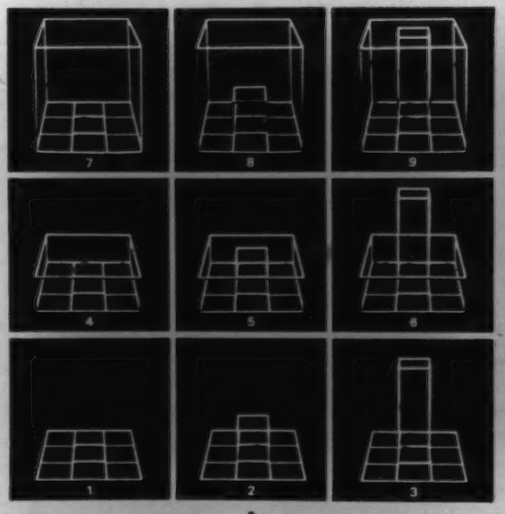
3	2	1
6	5	4
9	8	7

7	8	9
4	5	6
1	2	3

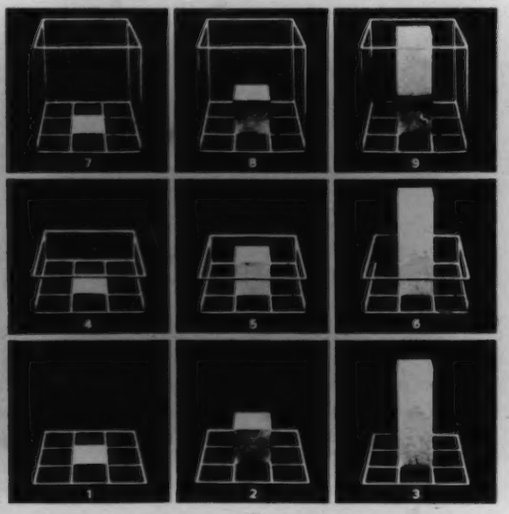
A

9	8	7
6	5	4
3	2	1

B



A



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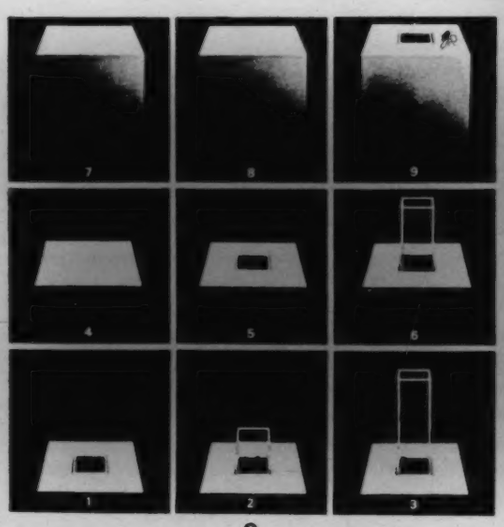

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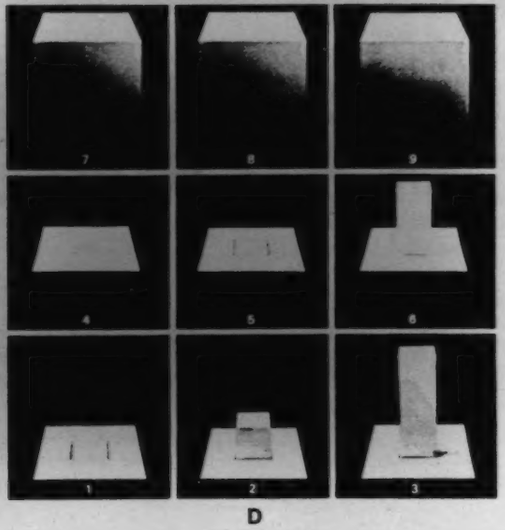


D

Serial Project
No. 1, 1966

Paragraphs on Conceptual Art

The editor has written me that he is in favor of avoiding 'the notion that the artist is a kind of ape that has to be explained by the civilized critic.' This should be good news to both artists and apes. With this assurance I hope to justify his confidence. To continue a baseball metaphor (one artist wanted to hit the ball out of the park, another to stay loose at the plate and hit the ball where it was pitched), I am grateful for the opportunity to strike out for myself.

I will refer to the kind of art in which I am involved as conceptual art. In conceptual art the idea or concept is the most important aspect of the work.[1] When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. This kind of art is not theoretical or illustrative of theories; it is intuitive, it is involved with all types of mental processes and it is purposeless. It is usually free from the dependence on the skill of the artist as a craftsman. It is the objective of the artist who is concerned with conceptual art to make his work mentally interesting to the spectator, and therefore usually he would want it to become emotionally dry. There is no reason to suppose however, that the conceptual artist is out to bore the viewer. It is only the expectation of an emotional kick, to which one conditioned to expressionist art is accustomed, that would deter the viewer from perceiving this art.

Conceptual art is not necessarily logical. The logic of a piece or series of pieces is a device that is used at times only to be ruined. Logic may be used to camouflage the real intent of the artist, to lull the viewer into the belief that he understands the work, or to infer a paradoxical situation (such as logic vs. illogic).[2] The ideas need not be complex. Most ideas that are successful are ludicrously simple. Successful ideas generally have the appearance of simplicity because they seem inexitable. In terms of ideas the artist is free to even surprise himself. Ideas are discovered by intuition.

What the work of art looks like isn't too important. It has to look like something if it has physical form. No matter what form it may finally have it must begin with an idea. It is the process of conception and realization with which the artist is concerned. Once given physical reality by the artist the work is open to the perception of all, including the artist. (I use the word 'perception' to mean the apprehension of the sense data, the objective understanding of the idea and simultaneously a subjective interpretation of both.) The work of art can only be perceived after it is completed.

Art that is meant for the sensation of the eye primarily would be called perceptual rather than conceptual. This would include most optical, kinetic, light and color art.

Since the functions of conception and perception are contradictory (one pre-, the other postfact) the artist would mitigate his idea by applying subjective judgment to it. If the artist wishes to explore his idea thoroughly, then arbitrary or chance decisions would be kept to a minimum, while caprice, taste and other whimsies would be eliminated from the making of the art. The work does not necessarily have to be rejected if it does not look well. Sometimes what is initially thought to be awkward will eventually be visually pleasing.

To work with a plan that is pre-set is one way of avoiding subjectivity. It also obviates the necessity of designing each work in turn. The plan would design the work. Some plans would require millions of variations, and some a limited number, but both are finite. Other plans imply infinity. In each case however, the artist would select the basic form and rules that would govern the solution of the problem. After that the fewer decisions made in the course of completing the work, the better. This eliminates the arbitrary, the capricious, and the subjective as much as possible. That is the reason for using this method.

When an artist uses a multiple modular method he usually chooses a simple and readily available form. The form itself is of very limited importance; it becomes the grammar for the total work. In fact it is best that the basic unit be deliberately uninteresting so that it may more easily become an intrinsic part of the entire work. Using complex basic forms only disrupts the unity of the whole. Using a simple form repeatedly narrows the field of the work and concentrates the intensity to the arrangement of the form. This arrangement becomes the end while the form becomes the means.

Conceptual art doesn't really have much to do with mathematics, philosophy or any other mental discipline. The mathematics used by most artists is simple arithmetic or simple number systems. The philosophy of the work is implicit in the work and it is not an illustration of any system of philosophy.

It doesn't really matter if the viewer understands the concepts of the artist by seeing the art. Once out of his hand the artist has no control over the way a viewer will perceive the work. Different people will understand the same thing in a different way.

Recently there has been much written about minimal art, but I have not discovered anyone who admits to doing this kind of thing. There are other art forms around called primary structures, reductive, rejective, cool, and mini-art. No artist I know will own up to any of these either. Therefore I conclude that it is part of a secret language that art critics use when communicating with each other through the medium of art magazines. Mini-art is best because it reminds

one of mini-skirts and long-legged girls. It must refer to very small works of art. This is a very good idea. Perhaps 'mini-art' shows could be sent around the country in matchboxes. Or maybe the mini-artist is a very small person, say under five feet tall. If so, much good work will be found in the primary schools (primary school primary structures).

If the artist carries through his idea and makes in into visible form, then all the steps in the process are of importance. The idea itself, even if not made visual is as much a work of art as any finished product. All intervening steps – scribbles, sketches, drawings, failed work, models, studies, thoughts, conversations – are of interest. Those that show the thought process of the artist are sometimes more interesting than the final product.

Determining what size a piece should be is difficult. If an idea requires three dimensions then it would seem any size would do. The question would be what size is best. If the thing were made gigantic then the size alone would be impressive and the idea may be lost entirely. Again, if it is too small, it may become inconsequential. The height of the viewer may have some bearing on the work and also the size of the space into which it will be placed. The artist may wish to place objects higher than the eye level of the viewer, or lower, I think the piece must be large enough to give the viewer whatever information he needs to understand the work and placed in such a way that will facilitate this understanding. (Unless the idea is of impediment and requires difficulty of vision of access.)

Space can be thought of as the cubic area occupied by a three-dimensional volume. Any volume would occupy space. It is air and cannot be seen. It is the interval between things that can be measured. The intervals and measurements can be important to a work of art. If certain distances are important they will be made obvious in the piece. If space is relatively unimportant it can be regularized and made equal (things placed equal distances apart), to mitigate any interest in interval. Regular space might also become a metric time element, a kind of regular beat or pulse. When the interval is kept regular whatever is irregular gains more importance.

Architecture and three-dimensional art are of completely opposite natures. The former is concerned with making an area with a specific function. Architecture, whether it is a work of art or not, must be utilitarian or else fail completely. Art is not utilitarian. When three dimensional art starts to take on some of the characteristics of architecture such as forming utilitarian areas it weakens its function as art. When the viewer is dwarfed by the larger size of a piece this domination emphasizes the physical and emotive power of the form at the expense of losing the idea of the piece.

New materials are one of the great afflictions of contemporary art. Some artists confuse new materials with new ideas. There is nothing worse than seeing art that wallows in gaudy baubles. By and large most artists who are attracted to these materials are the ones that lack the stringency of mind that would enable them to use the materials well. It takes a good artist to use new materials and make them into a work of art. The danger is, I think, in making the physicality of the materials so important that it becomes the idea of the work (another kind of expressionism).

Three-dimensional art of any kind is a physical fact. This physicality is its most obvious and expressive content. Conceptual art is made to engage the mind of the viewer rather than his eye or emotions. The physicality of a three-dimensional object then becomes a contradiction to its non-emotive intent. Color, surface, texture, and shape only emphasize the physical aspects of the work. Anything that calls attention to and interests the viewer in this physicality is a deterrent to our understanding of the idea and is used as an expressive device. The conceptual artist would want to ameliorate this emphasis on materiality as much as possible or to use it in a paradoxical way. (To convert it into an idea.) This kind of art then, should be stated with the most economy of means. Any idea that is better stated in two dimensions should not be in three dimensions. Ideas may also be stated with numbers, photographs, or words or any way the artists chooses, the form being unimportant.

These paragraphs are not intended as categorical imperatives but the ideas stated are as close as possible to my thinking at this time.[3] These ideas are the result of my work as an artist and are subject to change as my experience changes. I have tried to state them with as much clarity as possible. If the statements I make are unclear it may mean the thinking is unclear. Even while writing these ideas there seemed to be obvious inconsistencies (which I have tried to correct, but others will probably slip by). I do not advocate a conceptual form of art for all artists. I have found that it has worked well for me while other ways have not. It is one way of making art: other ways suit other artists. Nor do I think all conceptual art merits the viewer's attention. Conceptual art is only good when the idea is good.

[1] In other forms of art the concept may be changed in the process of execution.
[2] Some ideas are logical in conception and illogical perceptually.
[3] I dislike the term 'work of art' because I am not in favor of work and the term sounds pretentious. But I don't know what other term to use.

Drawing Project
1968 (Fours)

Each drawing is composed of four squares which are in turn divided into four squares, each with a different value (1, 2, 3, 4). Each quarter has a 1, 2, 3 and a 4. These series contain all twenty-four permutations of 1 2 3 4.
They are rendered in two methods, flat (A) and tonal (B).
(A) 1 is represented by vertical lines
2 is represented by horizontal lines
3 is represented by diagonal lines left to right
4 is represented by diagonal lines right to left
– these are the four different absolute directions of line
(B) 1 is the same as in (A)
2 is 1 + 2
3 is 1 + 2 + 3
4 is 1 + 2 + 3 + 4
– these are four gradations of tonality in controlled stops
The lines should be drawn as closely together as possible.
The sets of twenty-four permutations of 1 2 3 4 are arranged in this order:
1/1234 2/1243 3/1324 4/1342 5/1423 6/1432 7/2134 8/2143 9/2314 10/2341 11/2413 12/2431 13/3124 14/3142 15/3214 16/3241 17/3412 18/3421 19/4123 20/4132 21/4213 22/4231 23/4312 24/4321
There are four different series (systems for changing the combinations of the squares).
There are many other possible series but I have limited my choice to four.

I/Rotation

1 2	3 1
3 4	4 2
2 4	4 3
1 3	2 1

II/Mirror

1 2	2 1
3 4	4 3
3 4	4 3
1 2	2 1

In I and II all of the corners are the same, and all of the centre squares are also the same.

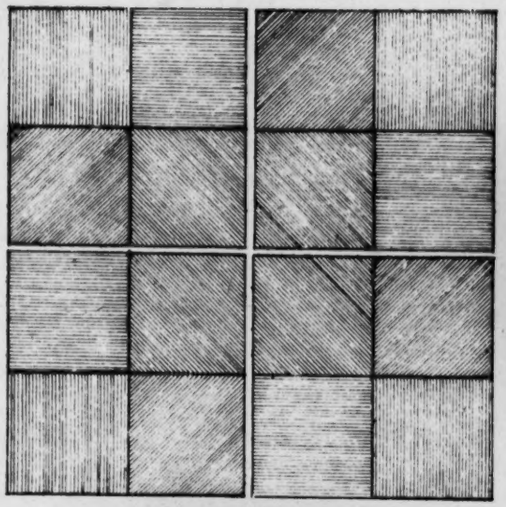
III/Cross Mirror

1 2	1 3
3 4	2 4
3 1	3 4
4 2	1 2

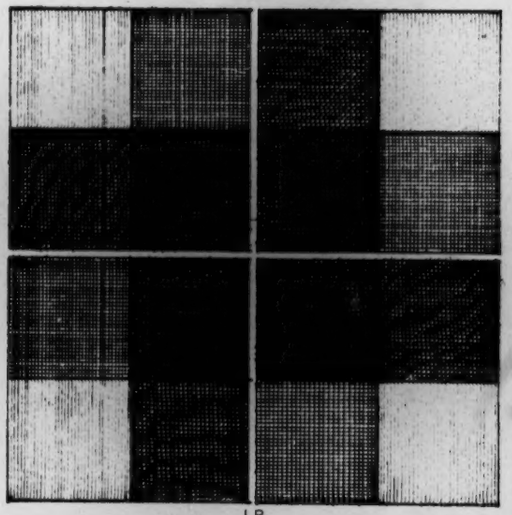
IV/Cross Reverse

1 2	3 4
3 4	1 2
4 3	2 1
2 1	4 3

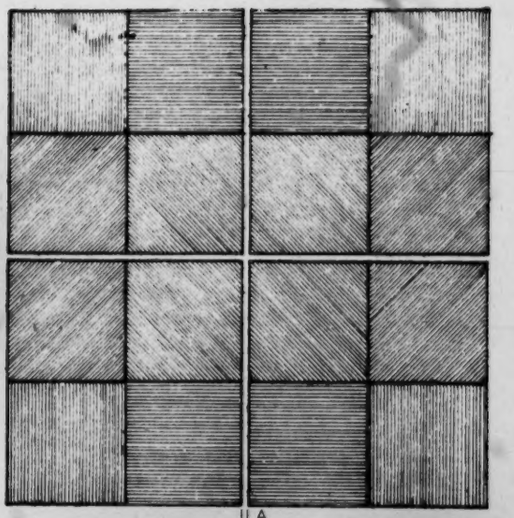
In III and IV all of the corners and all of the centres are different.
A system of four series comprising 192 drawings completes the work:
$4 \times 24 = 96 \times 2 (A + B) = 192$
The entire work will be done as a book.
The page of a book is an absolute, two-dimensional space. A book is complete and intimate. The whole set would be at hand.
There will be a drawing on each page and each spread of two pages will contain A and B of the same drawing.
The book will be separated into four sections, each containing a complete set done in methods A and B (forty-eight drawings). A will be only on left-hand pages, B only on right-hand pages.
The set will also be done on two-three-dimensional forms 6×4 ft.
One will contain A, the other B.
These two $4 \times 4 \times 6$ ft (high) forms will contain the whole set.
Each face will contain one series.
A and B will be placed side by side with similar series facing in the same direction.
I–North, II–East, III–South, IV–West
and placed close enough together to be seen at the same time.
The drawings are made in pencil (6H) on a baked white flat enamel surface.
Parts of the set, and individual drawings, have been done on walls.
The quality of line and appearance of the wall-drawing depend a great deal on the surface of the wall and the use of a hard pencil (6H).
The lines must be light to merge with the surface of the wall and, in the case of method B, to obviate the tonal and illusionistic properties of this method.
These walldrawings may be done by any hand (mine included) as long as the directions are followed, i.e. the lines be close together, light, and follow the correct direction. (Each person who draws the lines would, of course, do it slightly differently.)
The drawings are done on the wall, directly, so that a condition of absolute two-dimensionality is maintained.
Any intervening material on which drawings are made results in an object.
Two dimensional works are not seen as objects.
The work is the manifestation of an idea. It is an idea and not an object.
The work is immovable. The actual wall drawing either remains in place or is obliterated.
A similar drawing can be done in another location.
The drawing and its location are in an absolute relationship.



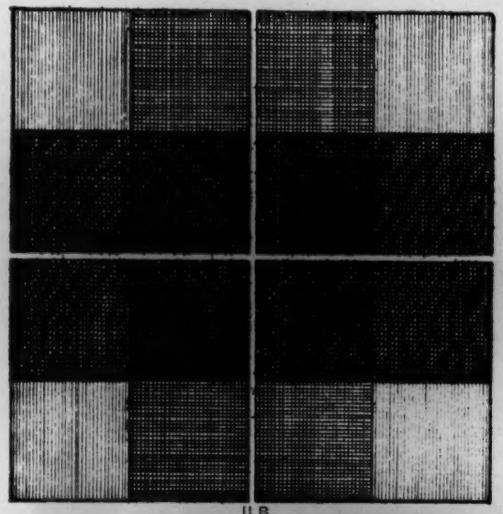
I A



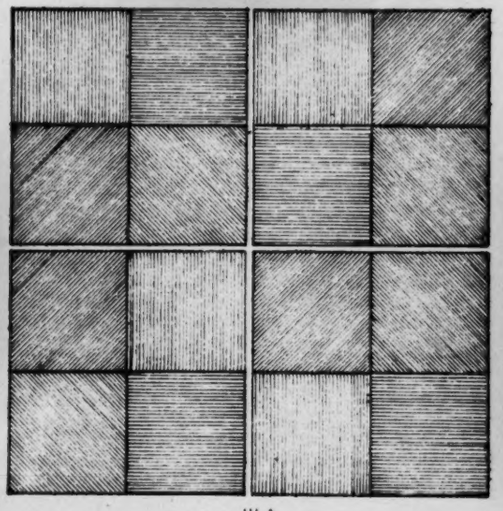
I B



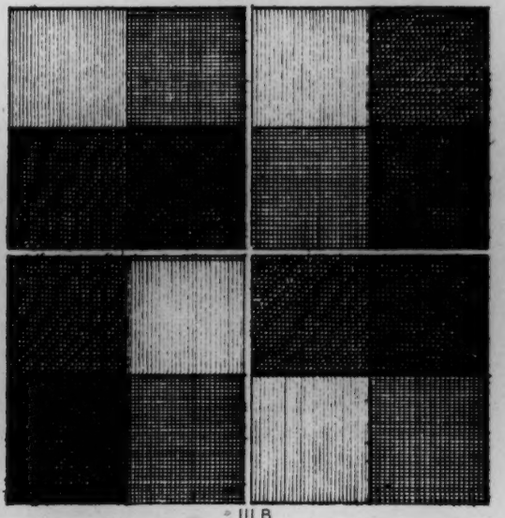
II A



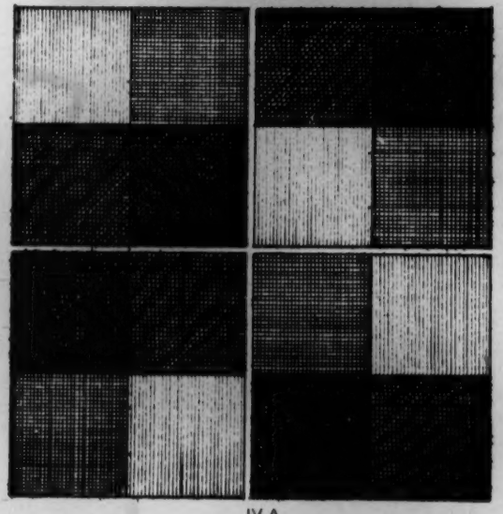
II B



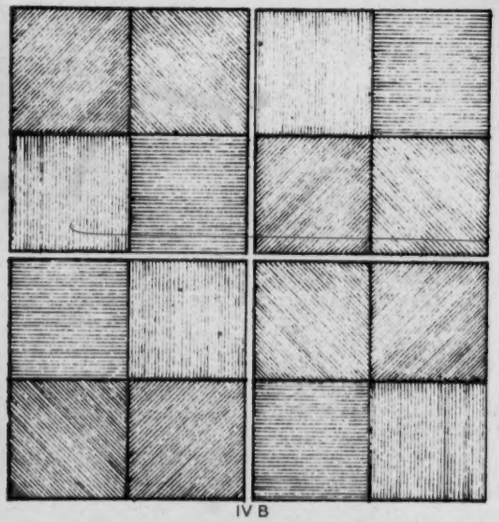
III A



III B



IV A



IV B

Drawing Projects
1968
(Fours)

Sentences on Conceptual Art

1 Conceptual Artists are mystics rather than rationalists. They leap to conclusions that logic cannot reach.
2 Rational judgements repeat rational judgements.
3 Illogical judgements lead to new experience.
4 Formal Art is essentially rational.
5 Irrational thoughts should be followed absolutely and logically.
6 If the artist changes his mind midway through the execution of the piece he compromises the result and repeats past results.
7 The artists' will is secondary to the process he initiates from idea to completion. His wilfulness may only be ego.
8 When words such as painting and sculpture are used, they connote a whole tradition and imply a consequent acceptance of this tradition, thus placing limitations on the artist who would be reluctant to make art that goes beyond the limitations.
9 The concept and idea are different. The former implies a general direction while the latter are the components. Ideas implement the concept.
10 Ideas can be works of art; they are in a chain of development that may eventually find some form. All ideas need not be made physical.
11 Ideas do not necessarily proceed in logical order. They may set one off in unexpected directions but an idea must necessarily be completed in the mind before the next one is formed.
12 For each work of art that becomes physical there are many variations that do not
13 A work of art may be understood as a conductor from the artists' mind to the viewers. But it may never reach the viewer, or it may never leave the artists' mind.
14 The words of one artist to another may induce an ideas chain, if they share the same concept.
15 Since no form is intrinsically superior to another, the artist may use any form, from an expression of words, (written or spoken) to physical reality, equally.
16 If words are used, and they proceed from ideas about art, then they are art and not literature, numbers are not mathematics.
17 All ideas are art if they are concerned with art and fall within the conventions of art
18 One usually understands the art of the past by applying the convention of the present thus misunderstanding the art of the past.
19 The conventions of art are altered by works of art.
20 Successful art changes our understanding of the conventions by altering our perceptions.
21 Perception of ideas leads to new ideas.
22 The artist cannot imagine his art, and cannot perceive it until it is complete.
23 One artist may mis-perceive (understand it differently than the artist) a work of art but still be set off in his own chain of thought by that misconstrual.
24 Perception is subjective.
25 The artist may not necessarily understand his own art. His perception is neither better nor worse than that of others.
26 An artist may perceive the art of others better than his own.
27 The concept of a work of art may involve the matter of the piece or the process in which it is made.
28 Once the idea of the piece is established in the artists' mind and the final form is decided, the process is carried out blindly. There are many side-effects that the artist cannot imagine. These may be used as ideas for new works.
29 The process is mechanical and should not be tampered with. It should run its course.
30 There are many elements involved in a work of art. The most important are the most obvious.
31 If an artist uses the same form in a group of works, and changes the material, one would assume the artists' concept involved the material.
32 Banal ideas cannot be rescued by beautiful execution.
33 It is difficult to bungle a good idea.
34 When an artist learns his craft too well he makes slick art.
35 These sentences comment on art, but are not art.

On Walldrawings

I wanted to do a work of art that was as two-dimentional as possible.

It seems more natural to work directly on walls than to make a construction, to work on that, and then put the construction on the wall.

The physical properties of the wall, height, length, color, material, architectural conditions and intrusions, are a necessary part of the wall drawings.

Different kinds of walls make for different kinds of drawings.

Imperfections on the wall surface are occasionally apparent after the drawing is completed. These should be considered a part of the wall drawing.

The best surface to draw on is plaster, the worst is brick, but both have been used.

Most walls have holes, cracks, bumps, grease marks, are not level or square and have various architectural eccentricities.

The handicap in using walls is that the artist is at the mercy of the architect.

The drawing is done rather lightly, using hard graphite so that the lines become, as much as possible, a part of the wall surface, visually.

Either the entire wall or a portion is used, but the dimensions of the wall and its surface have a considerable effect on the outcome.

When large walls are used the viewer would see the drawings in sections sequentially, and not the wall as a whole.

Different draftsmen produce lines darker or lighter and closer or farther apart. As long as they are consistent there is no preference.

Various combinations of black lines produce different tonalities; combinations of colored lines produce different colors.

The four basic kinds of straight lines used are vertical, horizontal, 45° diagonal left to right and 45° diagonal right to left.

When color drawings are done, a flat white wall is preferable. The colors used are yellow, red, blue and black; the colors used in printing.

When a drawing is done using only black lines, the same tonality should be maintained throughout the plane in order to maintain the integrity of the wall surface.

An ink drawing on paper accompanies the wall drawing. It is rendered by the artist while the wall drawing is rendered by assistants.

The ink drawing is a plan for but not a reproduction of the wall drawing; the wall drawing is not a reproduction of the ink drawing. Each is equally important.

It is possible to think of the sides of simple three-dimensional objects as walls and draw on them.

The wall drawing is a permanent installation, until destroyed. Once something is done, it cannot be undone.

Simon Frazer University, Vancouver, Canada, June, 1969
On the first wall a 12 in. line is drawn. Parallel lines ⅛ in. apart are drawn to this line in both directions until the row is architectually impeded by a floor, ceiling, door or window. On the second wall, two 12 in. lines are drawn perpendicular to each other and parallel lines are drawn until some part of the architecture impedes them. On the third wall, two 12 in. lines are drawn at right angles and a third line bisects them at a 45° angle. Parallel lines are drawn to these three lines until some part of the architecture interrupts the activity. On the fourth wall, two lines drawn at right angles are bisected by two lines drawn at 45° angles. Then parallel lines are drawn in all four directions until they reach an architectural obstacle.

Seattle Art Museum, Seattle, Washington, September, 1969
A five foot square of white painted on the pavement.

Ace Gallery, Los Angeles, Calif., Wall Show, September, 1969
Four draftsmen are to work on four walls for four consecutive days. Using a hard pencil, parallel lines are to be drawn ⅛ in. apart. The first draftsman draws vertical lines; the second draws horizontal lines; the third draws left to right diagonal lines and the fourth draws diagonal lines from right to left. Everyday each drafsman will work on a different wall making his kind of line.

Vancouver Museum of Art, Vancouver, Canada, September, 1969
Parallel lines, one foot long, are drawn with a hard pencil ⅛ in. apart for one minute. One inch under this row of lines, a second set of parallel lines are drawn for ten minutes. One inch under that set of lines, a third row of parallel lines are drawn for one hour.

Städtische Museum, Leverkusen, Germany, Konzept-Concept, November, 1969
Four squares 1m. by 1m. are drawn on walls adjacent to one another. Within the first square one line is drawn. Ten lines are drawn in the second square. One hundred lines are drawn in the third square. One thousand lines are drawn in the fourth square. No line should be shorter than 70 cm.

Nova Scotia College of Art and Design, Halifax, Canada, by mail 1969
1 A work that uses the idea of error.
2 A work that uses the idea of incompleteness.
3 A work that uses the idea of infinity.
4 A work that uses the idea of completeness.
5 A work that uses the idea of stupidness.
6 A work that is subversive.
7 A work that is not original.
These could be done in any form chosen by the student. Please ask your students not to do more than two of the above works.

Oberlin College, Oberlin, Ohio, 1970
A line of any length is drawn on the wall; a second line is drawn at right angles to the first line; a third line is drawn at right angles to the second, and another is drawn a tright angles to the third until the draftsman feels that enough lines have been done.

Paula Cooper Gallery, N.Y., N.Y., Drawing Show, February, 1970
Within a six ft. square five hundred vertical lines, five hundred horizontal black lines, five hundred left to right diagonal lines, and five hundred right to left diagonal blue lines are drawn.

Siegelaub-Claura Show, Paris, France, Summer, 1970
Part I: Within a one meter sq. on a white wall five hundred yellow, five hundred black, five hundred red, and five hundred blue straight lines are drawn. All lines must be between 10 cm and 20 cm long.
Part II: Part I is deleted.

Museum of Modern Art, N.Y., N.Y., Information Show, June, 1970
On four adjacent 4 ft. squares,
four drafsmen each using a different color pencil,
black, yellow, red and blue,
work for four hrs. a day,
for four consecutive days, each drawing
four in. straight lines in a different square each day,
and they are paid four dollars an hour.

Rivkin-Prokesh Gallery, Washington DC., April, 1970
On a wall four drafsmen, each using a different color pencil; black, yellow, red and blue will draw straight lines for as long as the gallery wishes after at least 12 hours of work has been completed by each draftsmen.

Studio International, Summer Issue, 1970
Seventy-four variations on the sentence: 'I am still alive. On Kawara.'

Tokyo Biennale, Japan, May, 1970
Inasmuch as the walls of the gallery cannot be drawn on and the artist does not want an artificial wall to be built for this purpose he would like to propose the following work: On the first wall to the left as one enters, pieces of white paper 4 cm by 4 cm, rolled, would be inserted into each of the wholes which covers the facing of the wall, all of the holes would be used. On the second wall, adjacent to the first, white and yellow squares of paper 4 cm by 4 cm would be rolled and placed at random in the holes. The white and yellow pieces should be of equal number, and all of the holes should be filled. On the third wall, an equal number of white, yellow and red squares of paper 4 cm by 4 cm would be inserted into the holes, all of which should be used. On the fourth wall, the same procedure would be used as in the other three but using an equal number of white, yellow, red and blue rolled pieces of paper. When the project is completed all of the holes will have paper projecting from them. The colors should be inserted at random with no thought of arrangement or design.

Biography

Born	1928	Hartford (Connecticut)
Education	1945–1949	Syracuse University, Syracuse N.Y. (Bachelor of Fine Arts)
Teaching	1964–1967	Museum of Modern Art School, New York
	1967–1968	Cooper Union, New York
	1969–1970	School of Visual Arts, New York
	1970	New York University, New York

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One-Man Exhibitions

1965 Daniels Gallery, New York
1966 Dwan Gallery, New York
1967 Dawn Gallery, Los Angeles
1968 Dwan Gallery, New York
Galerie Bischofberger, Zurich
Heiner Friedrich Gallery, Munich
Konrad Fischer, Düsseldorf
Ace Gallery, Los Angeles
1969 Konrad Fischer, Düsseldorf
Galleria L'Attico, Rome
Ernst Gallery, Hannover
Museum Hans Lange, Krefeld
1970 Wisconsin State University
River Falls, Wisconsin
Dwan Gallery, New York
ART & PROJECT, Amsterdam
Galerie Yvon Lambert, Paris
Galeria Sperone, Turin
Gemeentemuseum, Den Haag

Group Exhibitions

1964 Kaymer Gallery, New York (organized by Dan Flavin)
Museum of Contemporary Crafts, New York
Saint Mark's Church, New York
1965 Byron Gallery, New York, 'Box Show'
World House Gallery, New York, 'Sculpture from All Directions'
Graham Gallery, New York, 'Young Masters'
1966 Institute of Contemporary Arts, Boston, 'Multiplicity'
Jewish Museum, New York, 'Primary Structures'
Finch College Museum, New York, 'Art in Process'
Sachs Gallery, New York, 'New Dimensions'
Riverside Museum, New York, 'Abstract Artists Invitational'
Park Place Gallery, New York, '3 Man Show'
1966/67 Dwan Gallery, New York / Los Angeles, '10'
1967 Whitney Museum of American Art, New York, 'Sculpture Annual'
Los Angeles County Museum of Art, Los Angeles / Philadelphia Museum of Art, Philadelphia, 'American Sculpture of the Sixties'
Finch College Museum, New York, 'Serial Art'
Dwan Gallery, New York, 'Scale Models and Drawings'
Lannis Museum of Normal Art, New York
Dwan Gallery, New York, 'Language I'
1968 Larry Aldrich Museum, Ridgefield (Conn.) 'Cool Art'
Whitney Museum of American Art, New York, 'Recent Acquisitions'
Dwan Gallery, New York 'Language II'
Larry Aldrich Museum, Ridgefield (Conn.) 'Highlights'
Documenta IV, Kassel
Kunsthalle, Düsseldorf, 'Prospect 68'
Haus der Kunst, München, 'Neue Kunst U.S.A.'
Galerie René Block, Berlin, 'Minimal Art'
Dwan Gallery, New York, 'Earthworks'
Kunstmarkt, Cologne
Paula Cooper Gallery, New York, 'Benefit for Student Mobilization Committee to End the War in Vietnam'
1968/69 Gemeentemuseum, The Hague / Kunsthalle, Düsseldorf / Akademie der Künste, Berlin, 'Minimal Art'
Neue Pinakothek, Munich / Kunstverein, Hamburg / Neue Nationalgalerie, Berlin / Kunsthalle, Düsseldorf / Kunsthalle, Bern, 'Sammlung Karl Stroeher'
Museum of Modern Art, New York / Centre National d'Art Contemporain Grand Palais, Paris / Kunsthaus, Zurich / The Tate Gallery, London, 'The Art of the Real'
1969 Fine Arts Gallery, University of British Columbia, Vancouver, 'Some younger American painters and sculptors'
Urbana-Champaign, University of Illinois, 'Contemporary American Painting and Sculpture'
Kunsthalle, Bern / Institute of Contemporary Art, London, 'When Attitude becomes form'
Hetzel Union Building Gallery, Pennsylvania State University, 'Andre, Flavin, Judd, LeWitt and Morris'
Institute of Contemporary Art, University of Pennsylvania, Philadelphia, 'Between Object and Environment'
'March 1969', New York, organized by Seth Siegelaub
Grand Rapids Art Museum, Grand Rapids (Mich.), 'Sculpture of the Sixties'
Wide White Space Gallery, Antwerpen, 'Young American Artists'
University Gallery, University of Minnesota, Minneapolis, 'The Artist and the Factory'
Seattle Art Museum Pavillion, Seattle, '557.087' / Vancouver Museum of Art, Vancouver, '955.000'
Städtisch Museum, Schloss Morsbroich, Leverkusen, 'Konzeption / Conception'
July, August, September-exhibition / book organized / published by Seth Siegelaub
Long Beach Island, New Jersey, Mike Heizer, Sol LeWitt, Richard Long, Robert Smithson
Museum of Contemporary Art, Chicago, 'Art by Telephone'
Lafayette College, Easton (Penn.), 'Black White Exhibition of Paintings and Constructions'
Kunsthalle, Bern, 'Art from Plans'
Weatherspoon Gallery, University of North Carolina, Greensboro
Fort Worth Art Center, Fort Worth (Tex.), 'Drawings'
1970 Art Institute of Chicago, Chicago, '69th American Exhibition'
Visual Arts Gallery, New York
Biennale, Tokyo
Museum, La Jolla (Calif.)
Museum Turin, Arte Povera, Conceptual Art, Land Art
Museum of Modern Art, New York, 'Information'
Jewish Museum, New York, 'Walls'
Midland Group Gallery, Nottingham, 'Visions, Projects, Ideas'

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